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ABSTRACT

This report provides a descriptive overview of women's schooling and educational attainment, employment activity, and fertility behavior in Kinshasa, the capital of the Democratic Republic of Congo. Data were used from a series of five household surveys carried out between 1955 and 1990 to see how these variables have changed during this period. Data show the considerable growth of Kinshasa's population between 1955 and 1990, as well as the changing composition of the population by age, gender, nativity, and ethnicity. During this same period there have been substantial increases in school enrollment of youth and in the educational attainment of the adult population, particularly for females. Employment of women has increased steadily over time, in part associated with educational attainment and in part reflecting economic difficulties that began in the mid-1970s and continued throughout the period covered by the data. Subsequent to these economic difficulties, there have been distinct increases in the importance of the informal sector of the economy for women and for men. At the same time, primarily because of the increased educational attainment of women and more specifically with women's acquisition of secondary schooling, there has been a decline in fertility. (Contains extensive tables of data, several figures, and 45 references.) (BT)

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Women's Education, Employment, and Fertility in Kinshasa, Congo, 1955-1990: A Descriptive Overview

David Shapiro
The Pennsylvania State University

October 1997

Working Paper # 10-97-1

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Women's Education, Employment, and Fertility in Kinshasa, Congo, 1955-1990: A Descriptive Overview*

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Chapter 1. Introduction

This monograph provides a descriptive overview of women's schooling and educational attainment, employment activity, and fertility behavior in Kinshasa, the capital of the Democratic Republic of Congo. We use data from a series of five household surveys carried out between 1955 and 1990 to see how these variables have changed during this period. The focus is on data collected pertaining to women, although frequently data for men are provided for purposes of comparison and to give a more complete picture of what was happening in the city.

During the period covered by these surveys, there was more than a 10-fold increase in Kinshasa's population, from over 300 thousand to more than 3.5 million. As we shall see, this period also witnessed tremendous changes in women's schooling and educational attainment and in their employment activity. In addition, during the later stages there were distinct declines in fertility as well.

I. Overview of the Study

The following chapter gives an overview of the history of the city and its development, as the economy of first the Belgian Congo, then the Democratic Republic of the Congo, and then Zaire evolved.[1] The chapter also provides a demographic overview of

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[1]The city, initially known as Leopoldville, was part of the Congo Free State (essentially a private preserve of King Leopold of Belgium) from 1885 to 1908. Under intense international pressure due to abuses associated in particular with the rubber trade, King Leopold ceded the territory to the government of Belgium in 1908, and from then until 1960 it was the Belgian Congo. Following independence in 1960, the country took the name of Democratic Republic of the Congo, and Leopoldville became Kinshasa. In the early 1970s,

the city going back to the mid-1920s, encompassing not only size but also population composition. In addition to population pyramids, the chapter also gives information on place of birth of residents of Kinshasa and the changes over time in the ethnic composition of the city's population.

Chapter 3 examines schooling and educational attainment. We discuss the limits on schooling of females that existed for most of the colonial period, and the explosion in female schooling in Kinshasa that took place especially following independence. Data on school enrollment of female and male youth, and on educational attainment of adult women and men, are examined over the period covered by the various surveys.

Changes over time in the city's economy are discussed briefly at the outset of Chapter 4. We then examine data on the growth of employment overall, and on the structure of employment by class of worker (salaried versus independent) and by industry.[2] The chapter concludes with a look at overall employment rates and the incidence of employment of independents, by age and gender, and how these have varied as the city's economy has changed.

Fertility is the focus of Chapter 5. The first part of the chapter provides a close look at estimates from the various surveys of fertility from 1955 to 1990. In addition to

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the country was renamed Zaire. In 1997, following a successful rebellion, the name of the country was again changed, to Democratic Republic of Congo. We will, for the most part, use the current names for the city and the country in this work.

[2]We argue that since independents are very heavily concentrated in the informal sector of the economy while salaried workers are primarily in the modern sector, changes over time in the composition of the employed population by class of worker provide a good indication of growth of the informal sector relative to growth of the modern sector of the economy.

examining estimates of overall fertility, we also look at differences by ethnic group and by educational attainment group. The concluding part of the chapter examines data on childlessness, a key fertility outcome that was identified in the 1955 survey as associated with sharp fertility differences across ethnic groups, and on marriage, a most important proximate determinant of fertility. The monograph concludes with a brief summary chapter.

II. The Various Surveys

The five surveys that have been used in this work were carried out in 1955, 1967, 1975, 1984, and 1990. The first four of these were massive demographic surveys, while the last was a small-scale survey that we conducted. Herewith is a description of each of these data collection efforts.

In the 1950s, the Belgian government carried out a huge population survey in the Belgian Congo, under the direction of Anatole Romaniuk. The survey, which took place between May 1955 and February 1958, covered more than 1.36 million people, just under 11 percent of the total estimated population as of 1956 of nearly 12.8 million. In Kinshasa (Leopoldville), the survey took place from May through August of 1955, and covered nearly 44 thousand individuals (Romaniuk, 1968, Table 6.1, p. 245).

For present-day Kinshasa, results of the survey were given in two separate reports: one for the Cité Léopoldville, with a reported total population of 285,881 (Congo Belge, 1957a) and the other for the Territoire suburbain de Léopoldville, with a total population of 46,738 (Congo Belge, 1957b). These two areas made up the district of Leopoldville. Since

the latter area subsequently became part of the city and region of Kinshasa, our data analyses for 1955 typically combine data from these two reports.[3] In addition, particularly for data on fertility, we also make use of information providing in the published work of Romaniuk (1967, 1968).

The next large-scale household demographic and socioeconomic survey of Kinshasa took place from September 1967 to January 1968, under the auspices of the Congolese Institut National de la Statistique and with assistance provided by the French government (Institut National de la Statistique, 1969). The survey covered 10 percent of Kinshasa's urban population, and determined that population to be 901,520. A subsequent survey estimated that Kinshasa's total population in 1967, including the rural zones not covered in the 1967 survey, was 945,000 (Houyoux and Kinavwuidi, 1977, p. 6).

From mid-December of 1974 through the end of June of 1975 a third major demographic and socioeconomic survey of Kinshasa was undertaken (Houyoux and Kinavwuidi, 1977). The survey, which was part of a broader study of the western part of the country carried out from 1974 to 1977 (République du Zaïre et al., 1977, 1978a, 1978b), covered 10 percent of the city's population, and estimated that population at 1,635,600. In

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[3]Administratively, Kinshasa is at present both a city and a region in the Congo, composed of 24 zones. It is in fact a sprawling area of 9,965 square kilometers, or almost 3,850 square miles (Institut National de la Statistique, 1991b, Table 1). However, one of the 24 zones (Maluku) accounts for 80 percent of the total land area, and another (N'sele) accounts for an additional 10 percent (Institut National de la Statistique, 1991b, Table 3). These two zones are essentially rural, each with very low population density. The "territoire suburbain" of 1955 included an urban zone (consisting of the present highly urbanized zones of Matete and N'djili) with a population of 30,325, and a "rural and mixed" zone (the remainder of the territory of the district of Leopoldville) with a population of 16,413.

addition to the basic survey report, we have also had access to the data from the survey, through the Belgian Archives for the Social Sciences at the Catholic University of Louvain. Hence, in some of the tables and figures below we indicate that numbers for 1975 were calculated from the data.

In the middle of 1984, the Congo (Zaire) held its first and only national census since independence (the census is typically described in publications as the "Scientific Census of the Population, July 1984"). The definitive results of the census were published in 1991 (Institut National de la Statistique, 1991a, 1991b), and enumerated the city's population at 2,664,309.

In addition to these four massive data collection efforts, we also use data from a comparatively small-scale survey that we carried out from March to July of 1990 (Tambashe and Shapiro, 1991). Our survey was not a general household demographic and socioeconomic survey; rather, it was focused on women of reproductive age (13-49, reflecting -- at least at the low end -- the age range used to look at fertility in earlier surveys). Our sample consists of 2,450 women, and the sample was drawn after stratifying the population by three broad socioeconomic levels and by sector of employment.[4] We heavily oversampled women employed in the modern sector, and have consequently used sample weights to generate all population estimates reported in this monograph. For a more

[4]The three socioeconomic levels were high, medium, and low, containing (based on preliminary 1984 census data) roughly 4, 36, and 60 percent of the city's population, respectively. Reflecting our interest in modern-sector employment, our stratification by sector of employment simply differentiated women employed in the modern sector from all other women.

complete discussion of the data collection and the data set, see Tambashe and Shapiro (1991).

Because our 1990 survey covers a much smaller sample than the earlier surveys, standard errors are larger and the precision of estimates is lower, particularly for certain subgroups (e.g., older women with higher levels of education). Despite this, however, we believe that for the most part the 1990 data provide a good indication of changes that took place after 1984. One obvious limitation of the 1990 data, though, is that there is not systematic information on men, so we are unable to go beyond the 1984 data in looking at the educational attainment and employment of adult males. However, we did collect information on the school enrollment status of youth aged 6-25 in the households in which our sampled women resided. Hence, in the data reported below we have provided information for 1990 where such information was available.

Chapter 2. From Leopoldville to Kinshasa

I. A Very Brief History[5]

In 1881, the American explorer Henry Morton Stanley, acting on behalf of King Leopold of Belgium, founded what was to become the city of Leopoldville on the banks of the Congo River. Geography determined the location: Leopoldville was established at the downstream end of an extensive network of river transportation in the Congo Basin, dominated by the thousand mile stretch of the Congo River navigable up to what is now Kisangani, and just before an extensive series of rapids (the Cataractes) renders the river nonnavigable as it heads to its mouth at the Atlantic Ocean.

A remote outpost for most of its first 20 years, Leopoldville was connected to the Atlantic and ultimately to the rest of the world in 1898, when the railway linking it to the inland seaport of Matadi was completed. Establishment of the railway allowed Leopoldville to develop as a commercial center, in particular as a transit point for rubber and other products from the interior of the Congo bound for Europe, and for goods imported from Europe and headed for the interior. Thus, for example, between 1910 and 1930 the volume of goods passing through the river port of Leopoldville each year grew from 19 thousand tons to nearly 275 thousand tons, representing almost a doubling every five years (Denis, 1956, p. 588).

In 1923 Leopoldville became the capital of the Belgian Congo, and by the end of the 1920s the city had become an important administrative center. The growth of the city was

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[5]For more detail on the history of Leopoldville, see Baeck (1956), Capelle (1947), Denis (1956), and Whyms (1956).

rapid. Like many other emerging cities in sub-Saharan Africa, Leopoldville was not located where human resources were plentiful, and hence was obliged to import workers to meet the growing demand for labor. Recruitment of workers in rural areas served to attract Congolese men to employment in the emerging modern economic sector (Dhanis, 1953; Lamal, 1954; Lux, 1962). The Great Depression of the 1930s slowed the city's growth briefly: 6,000 men were sent back to their rural areas of origin in 1930 and 7,000 more in 1932 in response to the corresponding sharp decline in demand for labor (Denis, 1956, p. 575). This incident reflected the considerable control over labor and unemployment exercised by the colonial authorities (cf., Capelle, 1947), and it also emphasized the sensitivity to external events of this new urban center in sub-Saharan Africa.

The importance of external events was further highlighted with the onset of World War II. Supplies to Leopoldville were cut off, and as a consequence the city was obliged to develop its industrial base rapidly so as to become more self-sufficient. Labor recruitment, as before, was focused on finding men to work in the city's growing modern economy, and the colonial government strictly controlled migration to Leopoldville. However, the addition of considerable industrial activity to the city's existing commercial, transportation, administrative, and industrial activities resulted not only in substantial diversification of the city's economy (Baeck, 1956) but also in a doubling of the population between 1940 and 1945 and a doubling again between 1945 and 1950.

By 1960 Leopoldville had a population of roughly 400 thousand (Houyoux and Kinavwuidi, 1977, p. 19). When the Belgian Congo became independent in mid-1960, the

controls on migration were effectively eliminated, and -- fueled by the internal political strife of the early 1960s -- the city began another period of rapid growth. This growth was accompanied by a variety of economic and social changes, including rapid expansion of the informal or unstructured sector of the economy, and continuation of the substantial extension of schooling to women that had just begun near the end of the colonial period.

From 1965, when General Joseph Désiré Mobutu seized power in a coup d'état, until the mid-1970s the city (now Kinshasa, after one of the villages that existed near the site where Stanley first established Leopoldville) and the country experienced a period of political stability and economic growth. In the early 1970s, on the heels of this political and economic success, President Mobutu announced a policy to promote "Authenticity." To further "Authenticity," the President required citizens to abandon their European names in favor of African ones, he changed the names of many other cities throughout the country from their colonial designations to African names, and he changed the name of the country from Congo to Zaire. However, following the implementation in 1973 and 1974 of ill-conceived policies of Zairianization and radicalization (which essentially expropriated most businesses owned by foreigners and typically turned them over to unqualified Zairians, with very harmful and long-lasting adverse consequences), and the sharp decline in world copper prices that took place at roughly the same time[6], the economy entered a period of protracted crisis from which it has not yet emerged.

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[6]Copper was the major source of export earnings and government revenues.

The chronic crisis that began in the mid-1970s was accompanied by stagnation in the modern sector of employment and continued growth of the informal sector. Despite these problems, the population of the city continued to grow rapidly throughout the 1970s and 1980s. Economic growth and development were further hindered by a notoriously corrupt and poorly functioning public sector (some political scientists described the governance system as one of "kleptocracy"). During the 1980s, the country's government attempted, with assistance from the International Monetary Fund and the World Bank, to implement a series of structural adjustment programs aimed at improving efficiency of operation of the public sector and encouraging the growth and development of the private sector. A number of economic reforms were adopted, but political support for structural adjustment was unsteady and had an "on-again, off-again" character.

Beginning in the latter half of 1990, the chronic economic crisis became acute. After a number of years during which inflation had averaged 40-50 percent per year and real incomes declined substantially, suddenly very rapid inflation of 2,000-3,000 percent per year emerged, as the monetary authorities effectively abandoned any efforts to adhere to the structural adjustment program. The ensuing economic crisis, occurring in the midst of a political crisis characterized by increasingly vocal calls for democracy and the ouster of President Mobutu, came to a head in late September 1991. Initiated by soldiers who had seen the real value of their salaries shrink to almost nothing, rioting, looting, and generalized civil disorder broke out, first in Kinshasa and then in urban centers throughout the country. This resulted in the withdrawal of foreign donors and in a considerable shrinkage of the

Congo's and Kinshasa's fragile modern sector. A second round of looting and pillaging, this time solely by the military, took place at the end of January 1993.

Inflation has continued at an accelerated pace since late 1991, reaching as high as 500 percent in one month in Kinshasa at the end of 1993 and averaging 10,000 percent and more on an annual basis for much of 1993 and 1994. In 1995 and during the first half of 1996, inflation slowed to less than 20 percent per month, corresponding to well under 1,000 percent per year (Maton and Van Bauwel, 1996).

The national economy is in shambles. Industrial production has been reduced tremendously, as has mining production. Manufacturing activity was cut in half from 1990 to 1993-94, while mining output fell by 60 percent over the same period. Both sectors showed slight improvement in 1995 and early 1996, but by mid-1996 were still operating at only 50 to 60 percent of their 1990 levels (Maton and Van Bauwel, 1996). Kinshasa's economy has likewise suffered greatly during the 1990s. Transportation from the countryside to the cities became increasingly difficult, food prices skyrocketed, and malnutrition became increasingly prevalent.

In brief, the chronic crisis that characterized the Congo's economy since Zairianization in the mid-1970s became an acute crisis in the early 1990s. The political situation remained deadlocked until May 1997, when a rebellion begun in late 1996 and led by Laurent Désiré Kabila succeeded in taking power from President Mobutu.

Not long after declaring himself President, Mr. Kabila changed the name of the country back to Democratic Republic of Congo. Changing the economy so as to recover the

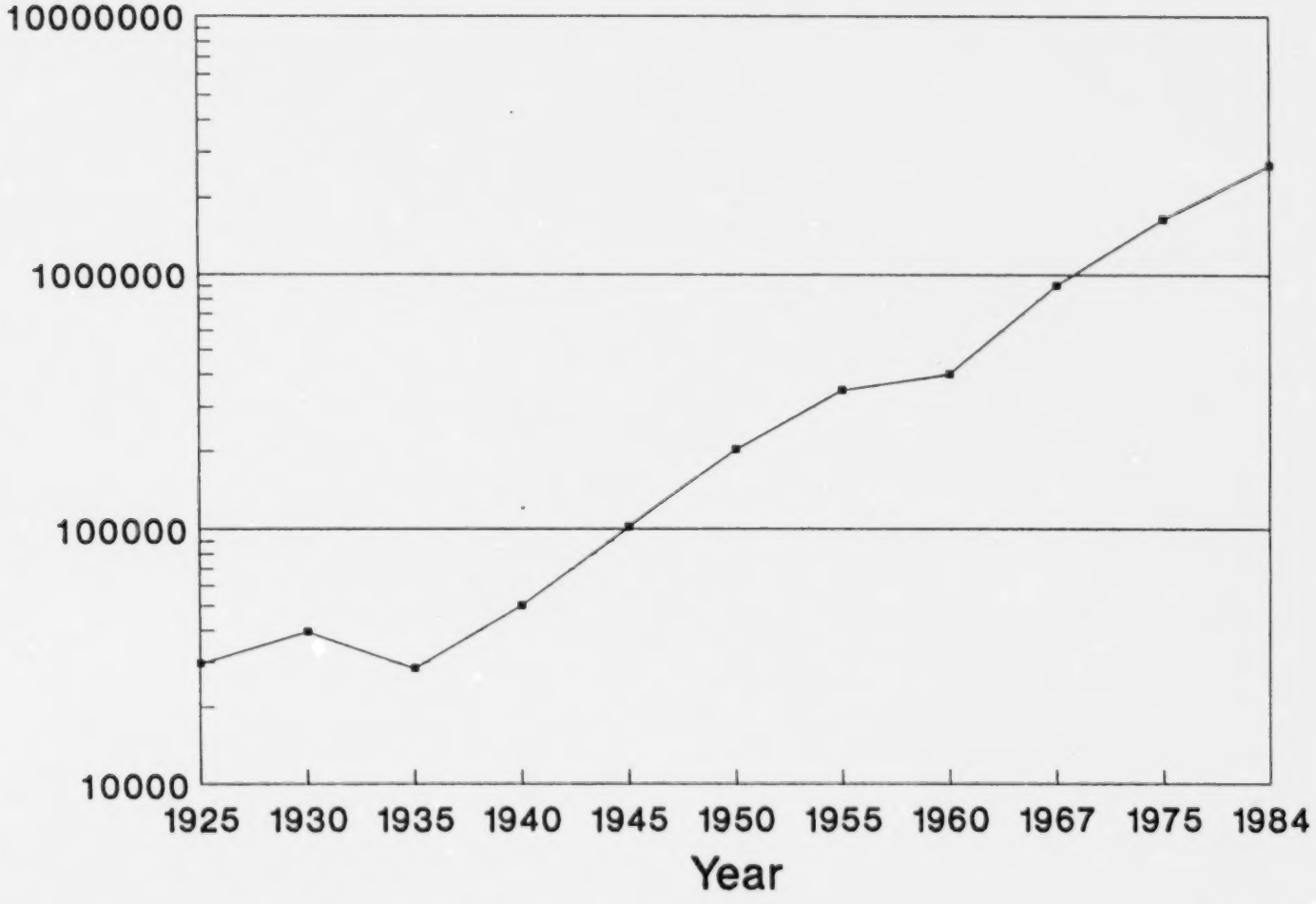
relative prosperity of the early 1970s will be a far more difficult task. Mr. Kabila now presides over a country rich in mineral wealth and with substantial agricultural potential, but one also with a badly deteriorated transportation and production infrastructure, ruined by years of neglect, governmental corruption, and more recently, extreme economic instability and civil war. Massive investment and rebuilding will be required if the Kabila government is going to have any hope of reinvigorating the Congolese economy.

II. A Demographic Overview

The evolution of Kinshasa's population over time up through 1984 is shown in Figure 2.1. The graph documents the adverse effects of the Great Depression, the very rapid growth following the onset of World War II, and the considerable growth following independence in 1960. From 1930 to 1935 there was a decline in the city's population of nearly 30 percent. This decline was more than made up by 1940, and during the 1940s the average annual growth rate of the population of Kinshasa was approximately 15 percent. Estimated growth during much of the 1960s was in excess of 12 percent per year, and subsequent growth has slowed gradually: from nearly 8 percent per year for the period from 1967-1975 to roughly 5.5 percent per year for the period from 1975-1984.

Projections for the period since 1984 typically have assumed continued growth in the neighborhood of 5-6 percent per year (Institut National de la Statistique, 1993; Shapiro, 1992), although the acute economic crisis of the 1990s may well have rendered those projections too high. As of 1997, we estimate the city's population to be somewhere

Fig. 2.1. Population, 1925-1984



between about 4.5 and 5 million.[7] The high end of this range is the outcome if one assumes 6 percent annual growth between 1984 and 1991 and then a reduction to 4 percent annual growth from 1991 through 1997, while assuming growth of 5 and 3 percent during each of the respective subperiods yields the lower estimate.[8]

As noted above, the early growth of the city was stimulated largely by labor recruitment. Since only men were being recruited, this led to a very sharp imbalance in the gender composition of the city's population during the colonial period. This imbalance, as well as related distortions to the gender composition of rural populations subject to heavy recruitment, were the source of some concern by a number of observers (Charles, 1948; Dhanis, 1953; Lamal, 1954), and the colonial government began to address the issue following World War II by promoting a considerable amount of housing construction.

Figure 2.2 shows the gender composition of the city's population and the relative presence of children, and how they have changed over time. During the 1920s there were only about 30 women per hundred men. This figure rose to 60 by the mid-1930s, reflecting the much more substantial decline in the male population than in the female population as a consequence of the Great Depression, and stayed in the range of 50 to 60 up through the

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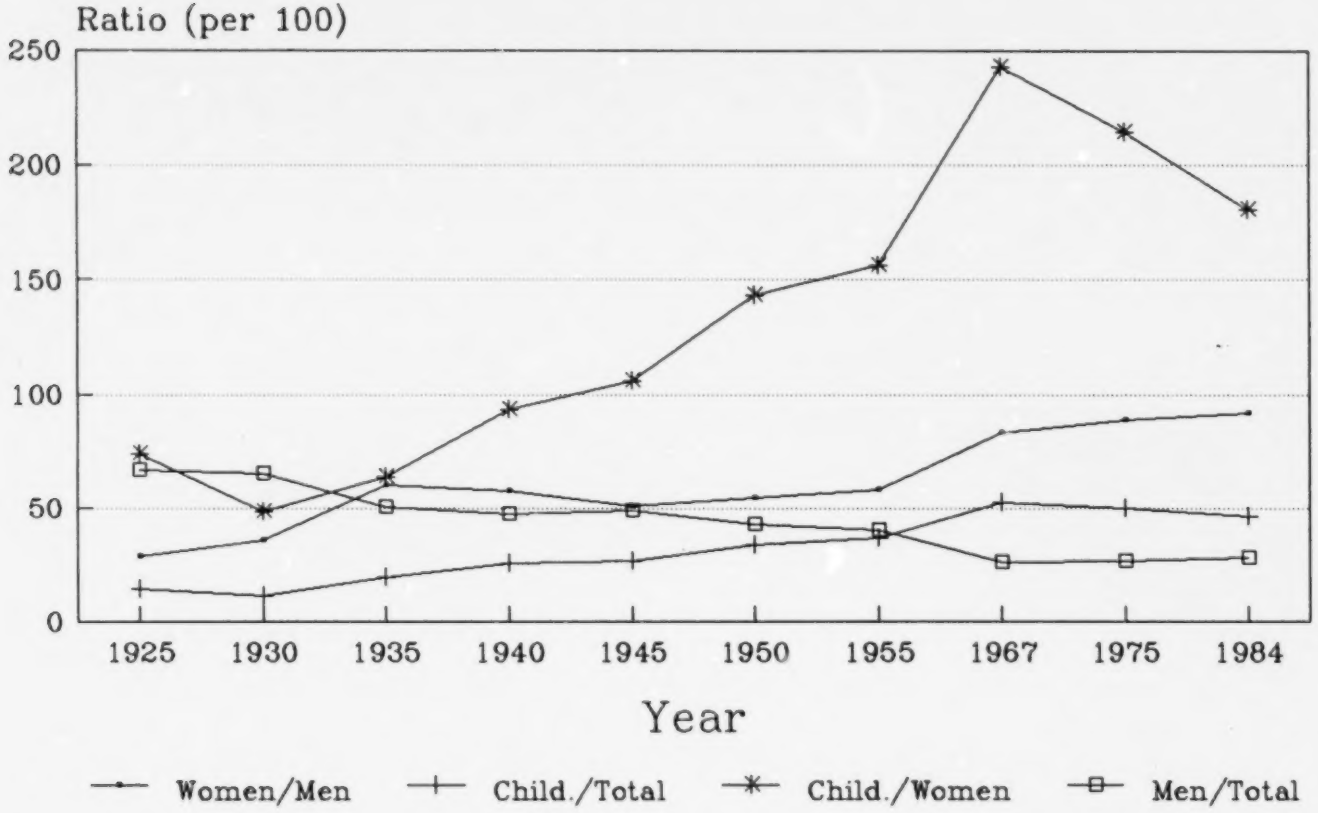
[7]Official projections (Institut National de la Statistique, 1993, P.1.01, pp. 17-18) are for a 1997 population of 5.27 million. These projections assumed that population growth would decline from 5.6 percent per year from 1985-89 to 5.2 percent in 1990-94 and to 4.7 percent from 1995-99 (Institut National de la Statistique, 1993, Table I10, p. 52).

[8]Reliable data on the city's current population are not available. However, there were reports of outmigration from Kinshasa to rural areas during the early 1990s, and the possibility of both reductions in fertility and increases in mortality resulting from the acute economic crisis further reinforces our conviction that growth must have slowed after 1990.

Fig. 2.2. Population Composition, 1925–1984



Sources: 1925–1950, CB 1957a, T.2, 1955 T.9; 1967 T.6; 1975 T.I.1; 1984 T.1.
Children are ages 0–14.

mid-1950s. Although the improvement was noted by some observers (Capelle, 1947), the continuing large gap led others during the colonial period to refer to the "mal démographique" of Leopoldville (Charles, 1948). Between 1955 and 1967 the gap was substantially reduced, and further narrowing by 1975 meant that there were nearly 90 women aged 15 and over for every 100 men in the same age range.

The shrinkage of the gender imbalance among adults was accompanied by growth in the proportion of the city's population represented by children (those under age 15): from only about 10 percent of the population in the late 1920s (when men made up 70 percent of the total population), their share grew to more than 35 percent by the mid-1950s and jumped to more than 50 percent by 1967, before falling slightly to 50 percent in 1975 and 46 percent in 1984. Reflecting the sharp changes pursuant to independence, the number of children per hundred women rose very rapidly between 1955 and 1967, from 156 to 243, and has declined subsequently.

The preceding considerations are summarized in Figure 2.3, which shows population pyramids for the city in 1955, 1967, 1975, and 1984.[9] The gender imbalance, although considerably lessened compared to previous years (cf., Figure 2.2), was still quite evident in 1955. Males outnumbered females in each age group from age 15 on, and for those aged 25 and older there were roughly twice as many men as women in each age group.

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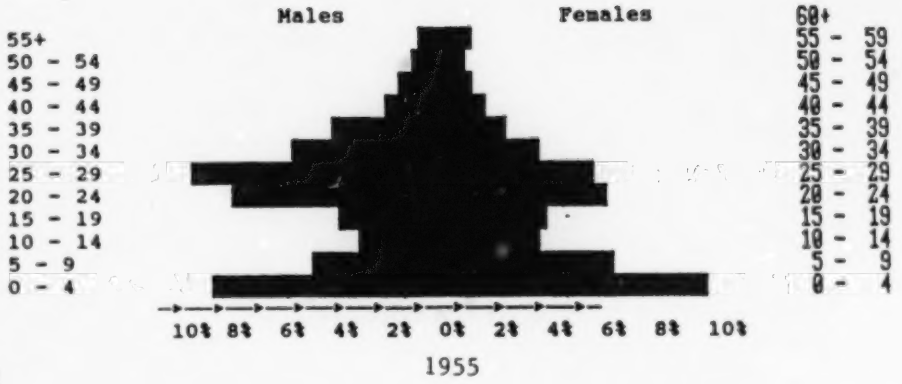
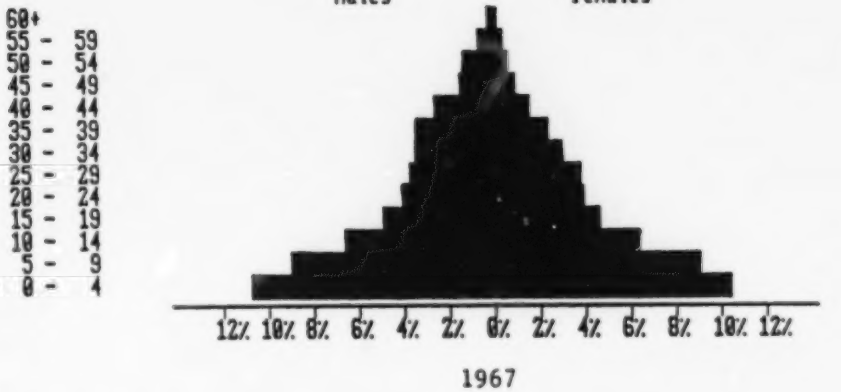
[9]The 1955 pyramid, like the 1955 data in Figure 2.2, is for the Cité Léopoldville only, not the entire district. That is, data for the "territoire suburbain," where the gender imbalance was substantially smaller, are not included.

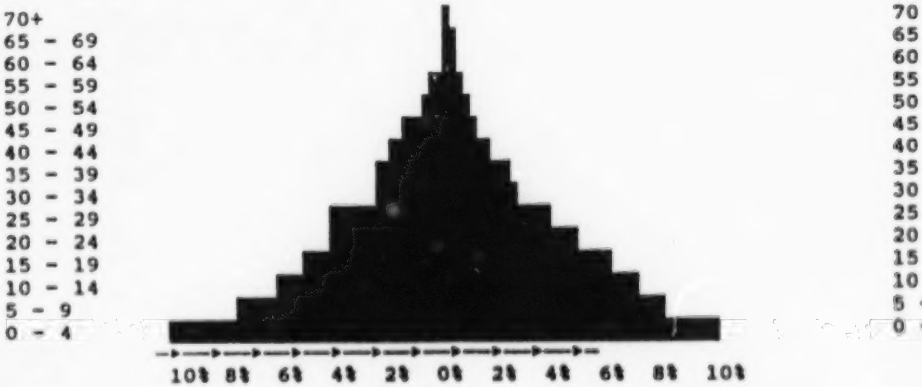
Fig. 2.3. Population Pyramids - 1955, 1967, 1975, and 1984



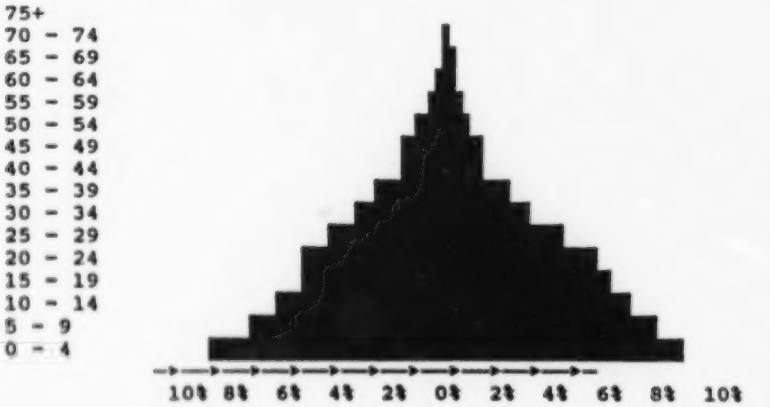
1955



1967



1975



1984

By 1967, however, the gender imbalance among adults had narrowed considerably. With the exception of ages 25-29, males outnumbered females beginning with the 10-14 age group, but only from age 35 upward was there a substantial excess of males over females. By 1975, much of this imbalance had disappeared. Men outnumbered women in all age groups beyond 20-24, but only for those aged 40 and up were there about 50 percent more men than women in each age group. A similar picture is evident for 1984, except that the relatively large imbalances began at age 50 rather than 40.

In addition to the changes over time in gender composition, and visually even more striking, the pyramids in Figure 2.3 also document the changes in age composition. More specifically, the "artificial" character of the city's age structure in 1955, brought about by the heavy impact of labor migration, is evident from the relatively small cohorts aged 5-19, which stand in sharp contrast to the swollen cohorts (especially for males) of those aged 20-44. By 1967, and also for 1975 and 1984, the pyramids have a conventional shape for a high-fertility population, with a large base reflecting the considerable extent of childbearing and relatively smooth declines in moving from younger to older cohorts. Continued sex-selective migration to the city is still reflected in bulges in the pyramids for males of labor force age, but nowhere near the extent to which this had been the case during the colonial period.

III. Nativity and Ethnicity

The following chapters focus on women's schooling, educational attainment, economic activity, and fertility, and they provide data on how each of these factors has developed over the past four decades. In the remainder of this chapter we examine two additional characteristics of the population and how they have changed over time: the place of birth of residents of the city, and their ethnic origins.[10]

As may be seen in Table 2.1, in 1955 only slightly more than one in four residents of Leopoldville had been born there. Further, the native-born population was extremely young, with 90 percent under the age of 15 and 95 percent under age 20. The population over age 20 consisted almost entirely of migrants to the city. By 1967, the proportion of residents who had been born in Kinshasa had increased substantially, rising to nearly half. Compared to 1955, there were clear increases in every age group in the proportion born in the city, with the increases being greatest for those aged 10-19 (this latter aspect reflects the elimination between 1955 and 1967 of the indentations at these ages in the city's age pyramid). However, this native-born group was still quite young.

By 1975, the trend toward increasing proportions born in Kinshasa continued, and by 1984, with further increases in every age group in the percentage born in Kinshasa, almost 60 percent of the city's population had been born there. Just over two thirds of this group

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[10]The focus in looking at ethnicity is on African residents. In the mid-1950s the European population numbered about 15 thousand and had an age and gender composition very similar to that of the African population (Baeck, 1956). As of 1984, the non-African population of Kinshasa was enumerated at just over 110 thousand, or a little more than 4 percent of the city's population (Institut National de la Statistique, 1991a, Table 2, p. 58.

Table 2.1. Percentage of the Population Born in Kinshasa, by Age, 1955-1984

Age group	Percentage Born in Kinshasa			
	1955	1967	1975	1984
0-4	80	89	92	95
5-9	56	73	78	88
10-14	41	71	65	79
15-19	18	39	49	64
20-24	5	20	31	47
25-29	2	10	15	33
30-34	1	5	10	23
35-44	1	2	6	13
45-54	1	2	4	7
55+	1	2	5	7
Total	26.5	47.1	49.7	59.4
Percentage of Kinshasa-born population:				
under age 15	90	88	77	69
under age 20	95	94	89	81

Note: The denominator for 1955 is restricted to those residing in Cité Léopoldville (comparable data for the "Territoire suburbain" were not published). The numerator includes those born either in Cité Léopoldville or in the "Territoire suburbain."

Sources:
1955: Congo Belge, 1957a, Tables 9 and 10.
1967: Institut National de la Statistique, 1969, Table 10, p. 35.
1975: Houyoux and Kinavwuidi, 1977, Annexe I.2, p. 69.
1984: Institut National de la Statistique, 1991a, Table 5, p. 61.

was under age 15 and 81 percent were under age 20. Over time, then, there has been a clear increase in the proportion of the city's population that is made up of individuals born in Kinshasa, and these individuals have been getting progressively more important in increasingly older age groups. Leopoldville in 1955 was a city populated by adults almost all of whom had been born and brought up in rural areas; by 1990, Kinshasa was a city with a substantial native-born adult population.[11]

Accompanying the changing composition of the city's population vis-à-vis place of birth has been a gradual shift with respect to the ethnic composition of the population. As shown in Table 2.2[12], ethnic groups from what is now the province of Bas-Congo accounted for about 40 percent of Leopoldville's population in 1955.[13] The majority of this group,

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[11]Among women in our 1990 survey, almost 40 percent of those aged 30-34, nearly half of those aged 25-29, and close to 60 percent of those aged 20-24 had been born in Kinshasa.

[12]Table 2.2 identifies broad ethnic groups that are important in Kinshasa (and whose behavior with respect to fertility will be analyzed in more detail in Chapter 5). It also shows the provinces of the country from which these groups come. In the Congo, those born in Kinshasa are classified according to their ancestral region of origin. Hence, the province of Kinshasa is not included in the table. Data on ethnic group from the 1967 survey report were not sufficiently detailed to be included in Table 2.2; however, the information provided in the report indicates that the ethnic composition in 1967 was intermediate between that of 1955 and that for 1975. Census reports from 1984 do not provide information on the ethnic origins of the population.

[13]The data in the table for 1955 are limited to Cité Léopoldville because only partial data were provided on the ethnic origins of residents of the "territoire suburbain" (for principal tribes). However, since the principal tribes from the Bakongo South and Bakongo North groups alone accounted for 39 and 9 percent of the total "territoire suburbain" population, these two groups combined accounted for a little over 40 percent of the total (Cité Léopoldville and "territoire suburbain") population. Angolans represented an additional 9 percent of the "territoire suburbain" population, and another 5 percent can be identified as coming from the Kwilu-Kwango group. The remaining 39 percent of the "territoire suburbain" population, for which ethnic group cannot be identified based on available data, most likely (based on geographic proximity) were from the Bakongo South, Kwilu-Kwango, and/or Mongo groups.

Table 2.2. Ethnic Composition, by Broad Ethnic Group, 1955-1990
(percentage distributions)

Group	Province(s) of Origin	1955	1975	1990
Bakongo North	Bas-Congo	8	10	8
Bakongo South	Bas-Congo	32	26	22
Kwilu-Kwango	Bandundu	15	26	37
Mongo	Equateur, Kasai Occidental, Bandundu	6	8	7
Ubangi	Equateur, Haut-Congo	8	8	8
Luba and related	Kasai Occidental, Kasai Oriental	5	9	11
Other Congolese	Haut-Congo, Kivu, Maniema, Shaba	2	2	2
Foreigners	Non-Congo	25	12	5
	Angola	21	11	4
Total		100	100	100

Note: Data for 1955 and 1975 refer to the entire population; data for 1990 are for the population of women aged 15-49.

Sources:
1955: Congo Belge, 1957a, Table 6.
1975: Calculated from data on tribe.
1990: Calculated from data on tribe.

in turn, came from the portion of Bas-Congo province that is south of the Congo River and close to the city. A smaller number originated in the portion of the province that is north of the river, which for the most part is located farther from the city. Another quarter of the population consisted of non-Congolese Africans, more than 85 percent of whom were from neighboring Angola. The only other group with as much as 10 percent of the city's population was the Kwilu-Kwango group[14] from Bandundu province immediately to the east of the city, where there had been considerable labor recruiting for Leopoldville (Dhanis, 1953; Lamal, 1954).

By 1975, the growth of migration to Kinshasa from elsewhere in the Congo had resulted in a sharp drop in the share of the city's population that consisted of people from outside of the country, and a more modest decline in representation of ethnic groups from Bas-Congo. The largest increase was for individuals from Kwilu-Kwango, and the share of the population represented by the Luba and related group had nearly doubled. These changes continued through 1990, by which time foreigners had become only a small proportion of the population, the Kwilu-Kwango group had surpassed the two Bakongo groups combined, and the Luba and related group had further increased its share of the city's population.

Overall, then, Congolese have made up an increasingly larger portion of the city's total population over time. In addition, there has been a clear trend toward increased

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[14]This designation represents a fairly heterogeneous amalgamation of smaller ethnic groups that are grouped together based largely on their geographic origin (Kwilu and Kwango sub-regions constitute the southernmost two-thirds of Bandundu province). See the Appendix of Shapiro and Tambashe (1997) for further discussion of the different ethnic groups.

diversity of the Congolese population of Kinshasa, with notable reductions in the proportion of residents from Bas-Congo, very substantial increases in the representation of ethnic groups from Kwilu-Kwango in Bandundu, and increased representation of the Luba group from the more distant provinces of Kasai Occidental and Kasai Oriental.

Chapter 3. Schooling and Education

"Because of the fact that the black woman is not sufficiently educated, she can not participate in an effective manner in the evolution of our country." (Bolamba, 1949, p. 9)

I. From Colonial Limits to Post-Independence Explosion to Economic Crisis

During most of the colonial period, access to schooling for Congolese women was extremely limited. At the outset, this policy reflected in large part an effort to meet the rapidly growing needs of the colony for (male) office workers in government and in the private sector, as well as the growing demand for skilled and semi-skilled labor (Bolamba, 1949; Hulstaert, 1951; Mukadi, 1979). In the early 1920s, a commission on education established by the Minister of Colonies recognized the importance of providing schooling to females (Mukadi, 1979). Despite this, however, schooling of females continued to lag far behind that of males. The absence of female teachers has also been cited as a factor contributing to the delay in schooling of females (Bolamba, 1949; Hulstaert, 1951).

The provision of schooling to males had, by the end of World War II, resulted in the emergence of a growing class of educated Congolese men (so-called "évolués"). However, the continued imbalance between the schooling of males and that of females began to attract considerable attention. In addition to the factors cited above, several observers have argued that among many Congolese parents there was a lack of interest in sending their daughters to school (Bolamba, 1949; Hulstaert, 1951; Comhaire-Sylvain, 1968). Many parents simply did not see the point. For example, Comhaire-Sylvain (1968, p. 17), discussing the situation in Leopoldville in 1945, notes that "A mother who was told to send her daughters to school responded: 'After school will they go and work in an office? No. Hence, it's not worth it.'"

By the early 1950s there were numerous voices, Belgian as well as Congolese, calling for a vastly increased effort on the part of the colonial government to provide schooling for girls as well as for boys (cf., Bolamba, 1949; Bukasa, 1951; Wassa, 1951; Van Bulck, 1956). The need for such an effort, particularly in urban areas, was manifest, as indicated by Baeck (1956, pp. 626-627): "The gap between the level of evolution of women and men is still very large. Women, more than men, remain attached to the traditional milieu...There is no doubt that the promotion and the emancipation of the indigenous woman are the necessary conditions for harmonious evolution in the urban milieu."[15]

Following independence, there was a considerable push to promote schooling, and with emphasis on provision to girls as well as boys. During the 1960s the country's school enrollments grew at roughly twice the pace of growth of the population at large, and this rapid growth, accompanied by growing proportions of female students, persisted during the 1970s (Kikassa, 1979). After independence as well as before, Kinshasa benefited from its privileged position as capital and hence has consistently had distinctly higher school enrollments and educational attainments than elsewhere in the country.

Chronic economic problems created severe difficulties for the education sector during the 1980s. There were sharp reductions in national budgets for education associated with efforts at structural adjustment, and in response to deterioration in the public system private

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[15]Many of the calls for educating women were oriented not towards providing training that would equip them to enter the labor market, but rather to give them the opportunity and knowledge to become better mothers and housewives. For example, see Bolamba (1949) and Bukasa (1951).

schools (particularly at the primary level) mushroomed throughout Kinshasa.[16] Despite the economic problems, enrollment rates in the city continued to increase, and the educational profile of the population changed dramatically.

II. School Enrollment and Educational Attainment

Figure 3.1 shows school enrollment rates for five-year cohorts of school age, separately by gender, and gender differences in enrollment rates, for the five surveys from 1955 through 1990.[17] In considering the structure of enrollment rates at any point in time, it is clear that peak enrollment takes place among those aged 10-14. In part this reflects the inclusion of five-year olds in the youngest group, but it also reflects delayed entry to school. That is, many students do not begin their studies at the "normal" age of six but instead a year or two later. When overall enrollments are low (e.g., as was the case in 1955), those aged 5-9 have the second-highest enrollment rates, while at higher overall enrollment levels (as in 1975 and later) the enrollment rates are greater for the 15-19 age group than for those aged 5-9.

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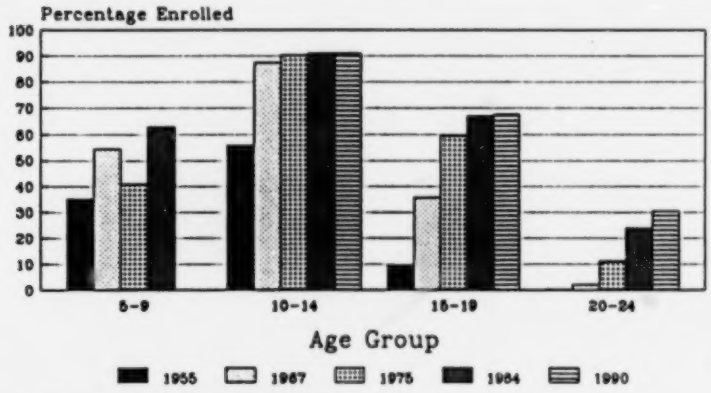
[16]Data from our 1990 survey indicate that 28 percent of enrolled youth aged 6-9 were in private schools, as were 14 percent of students aged 10-14.

[17]Data on school enrollment for 1990 are based on information collected on the enrollment status of more than 9,000 youth aged 6 to 25 residing in the households of survey respondents. Because data were not collected on five-year olds, there is no information in the figure for the 5-9 age group in 1990. If all five-year olds enumerated were assumed to have not yet begun school, the resulting enrollment rates would be slightly lower than those from the 1984 census, for both boys and girls.

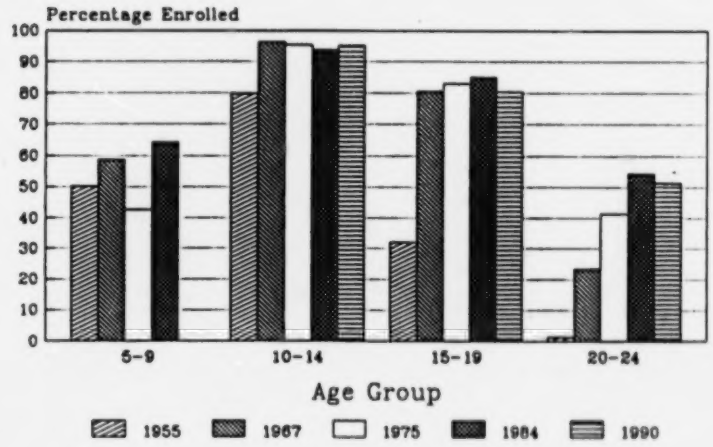
Fig. 3.1 School Enrollment Rates by Age Group, 1955–1990

a. Females

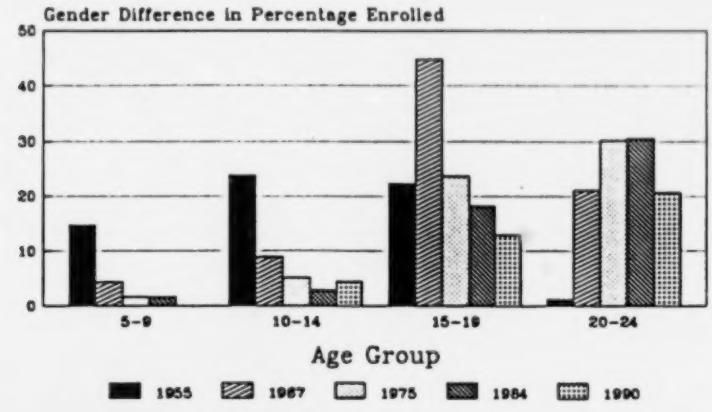


Sources: CB, 1957a, T. 21; CB, 1957b, T.15; INS, 1969, Annexe 15; calculated from data (75,90); INS, 1991, T. 1, T.9.

b. Males



c. Gender Differences



Male enrollment rate minus female enrollment rate.

Reflecting the effort made by colonial authorities following World War II to bring increasing numbers of girls in urban areas into the educational system (Bukasa, 1951, pp. 175-176), by the mid-1950s over a third of girls in Kinshasa aged 5-9 and almost 60 percent of those aged 10-14 were enrolled in school. Not quite 10 percent of those aged 15-19 were in school in 1955 (Fig. 3.1.a). There was a very rapid expansion in enrollment rates between 1955 and 1967, with more than a doubling taking place in the overall enrollment rates of those aged 5-24. Of particular note during this period were substantial increases in female enrollment rates for those aged 5-19, such that almost 90 percent of girls aged 10-14 and more than 35 percent of females aged 15-19 were enrolled in school in 1967.[18]

Continued expansion of enrollment of females aged 15-19 is evident between 1967 and 1975, and in the latter year over 10 percent of young women aged 20-24 were in school. Moving forward to 1984, there are further increases in enrollment rates for the youngest and

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[18]The high enrollment rates for those aged 5-9 in 1967 largely are a consequence of the timing of the survey. The 1967 survey was carried out principally during the last quarter of the calendar year, and hence at the outset of the school year. By contrast, the 1975 and 1990 surveys were carried out later in the school year, and the 1984 Census refers to essentially the end of the school year. Since age is calculated by subtracting the year of birth from the survey year, this means that a survey carried out late in the calendar year, like the 1967 survey, will count as six-year olds children who were eligible to begin school at the outset of the school year. However, a survey conducted early in or midway through the calendar year will count as six-year olds children who were only age five when the school year began. Hence, absent any other changes, the latter survey will find lower enrollment rates by age for the 5-9 age group. Indeed, examination of enrollment rates by individual years of age in 1967 and in 1975 reveals that among those age 6, enrollment rates in 1967 were 39-45 percent, compared to only 11-12 percent in 1975. Further, below age 15, the rates for children age x in 1967 are very close to the rates for children age x+1 in 1975.

oldest age groups, in particular, and enrollment of young women in their early 20s continued to increase up to 1990.[19]

Overall, then, the period from 1955 to 1990 witnessed quite substantial increases in female school enrollment. Very high enrollment rates for those aged 10-14 were reached early on (by 1967), while enrollment rates for the 5-9 and 15-19 age groups increased over time up through 1984 and enrollment rates for those aged 20-24 continued to increase through 1990.

For males there is a similar general pattern to changes in enrollment rates over time, as shown in Figure 3.1.b. The most obvious difference is that the rates for males are consistently higher than those for females. In addition, the pace of change is more rapid for males in the 15-19 age group (e.g., the 80 percent level is reached early, in 1967), and the increased enrollment rates of young women aged 20-24 after 1984 are not matched by increases in enrollment rates of young men in this age group.[20]

Gender differences in enrollment rates in 1955 were relatively large for those aged 10-14 and 15-19, and distinctly smaller among those aged 5-9 (Figure 3.1.c). The

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[19]Because of frequent grade repetitions, as well as delayed entry to school, it is typically the case that students in their early 20s are still in high school. In 1984, for example, 87 percent of young women aged 20-24 who were students had not completed high school. The corresponding figure for their male counterparts was 83 percent (Institut National de la Statistique, 1991a, Table 9, p. 67).

[20]Indeed, the numbers show a decline in enrollment of males aged 20-24 between 1984 and 1990, from 54.5 percent to 51.3 percent. It is possible that this accurately reflects what took place, and in particular shows the effects of prolonged economic crisis in reducing the incentives for young men to invest in education. However, it is useful to recall that the 1990 survey was a comparatively small one. Consequently, we prefer to be conservative in assessing the change since 1984.

substantial narrowing of the gender gap in enrollment in going from older to younger cohorts that is evident in the 1955 cross-section reflects in part the fact that as of 1955, increased access of females to schooling was a quite recent phenomenon.

As is evident from Figure 3.1.c, the modest gender gap in enrollment of children aged 5-9 in 1955 narrowed substantially by 1967, and by 1975 and since it has been very small. There has been a similar decline in gender differences in enrollment among those aged 10-14. As of 1990, enrollment rates of boys under age 15 were higher than those of girls under age 15, but only slightly so. Reflecting larger gains for males than for females, the gender gap in enrollment of 15-19 year olds widened sharply between 1955 and 1967, dropped almost as sharply by 1975, and has continued to decline since. Among those aged 20-24, a gender gap emerged in 1967, widened as of 1975 and 1984, and then narrowed by 1990.

In effect, then, as enrollment rates rose over time for both males and females, there was a clear tendency for gender gaps in enrollment eventually to diminish. These reductions began with the youngest age groups and spread progressively to older age groups. For the two oldest age groups there was in fact a widening of gender differences during the period examined, but in each case there is evidence of subsequent narrowing of the differences.

A somewhat closer look at enrollment rates is provided by the enrollment profiles by single year of age shown in Figure 3.2.[21] As noted in footnote 4, timing of the 1967 survey resulted in inordinately high enrollment rates for those under age 10 in particular.

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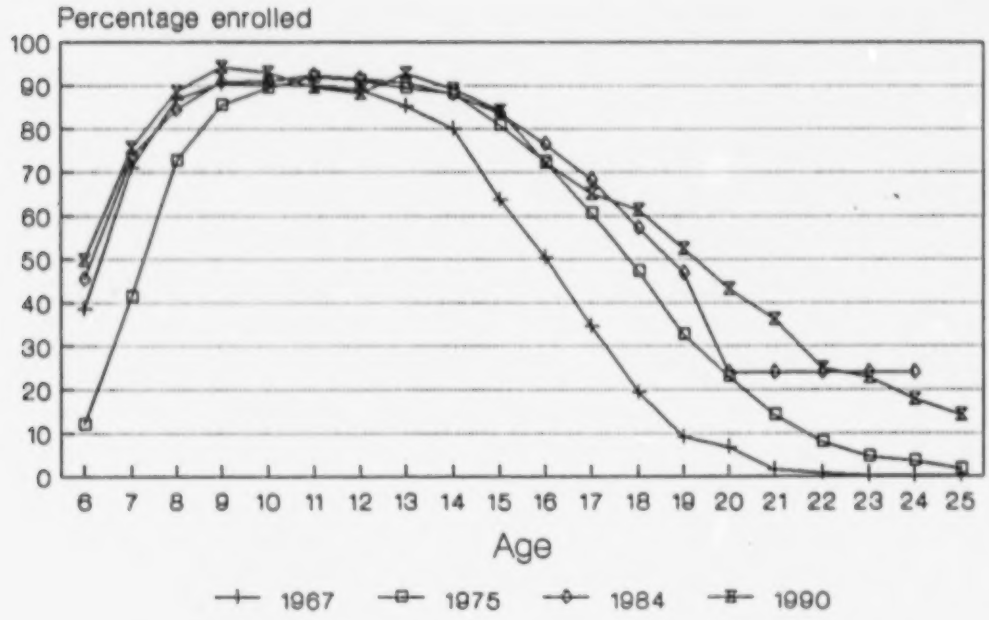
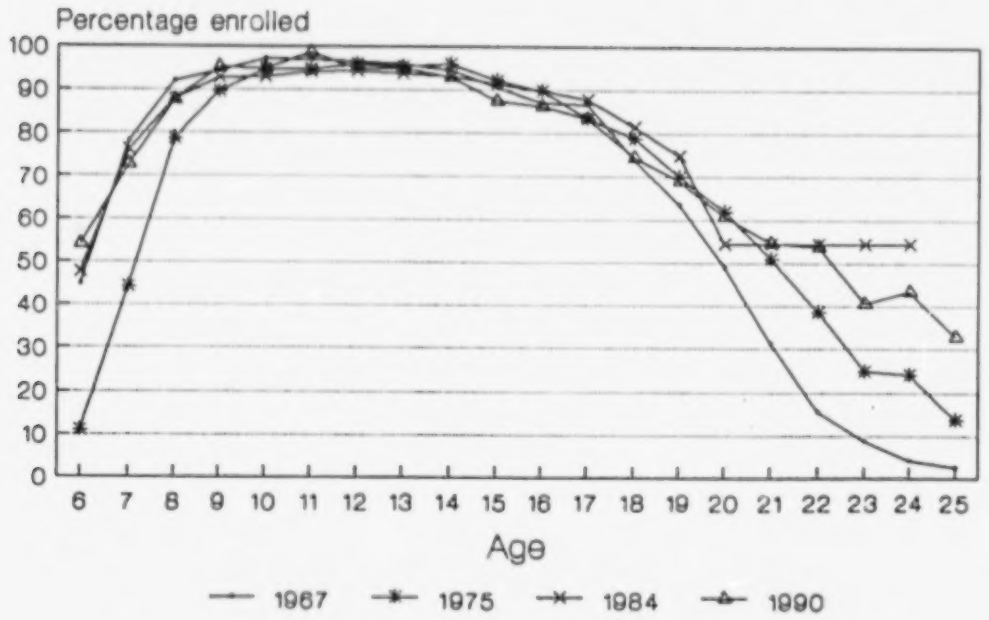
[21]Data for 1955 were not available for single years of age, and data for 1984 were not available for single years of age above age 19.

Fig. 3.2. Enrollment Rates by Age, 1967-1990

a. Females



b. Males



Taking this into account, the figure may be summarized by noting that over time, for both females and males, the middle portion of the enrollment profile has remained fairly stable, while the left and right "wings" of the profile have drifted upward.

That is, enrollment rates for those aged 10-14 are high throughout the period from 1967-1990 (and well above the rates prevailing in 1955). For those aged 6-9, there was a distinct increase in the rates that took place between 1975 and 1984, suggesting that delayed entry to school was becoming increasingly less common during this period. For those aged 15 and over, there are slight differences by gender. Among females, enrollment rates rose from 1967 to 1975 for those aged 15-17 and then did not change much subsequently, while for ages 18 and higher there appears to be a more steady increase in enrollment rates throughout the period being examined. Among males, by contrast, there are already high enrollment rates in 1967 up to age 18 or so that do not increase much subsequently. Beyond age 18 there are increases in enrollment rates up through 1984, but no further increases afterward and if anything there appears perhaps to be a slight decline between 1984 and 1990.

The trends of rising enrollment rates and narrowing of gender differences in enrollment over time will influence the educational attainment of the adult population as well. However, the impact is gradual. This may be seen in Table 3.1, which shows the educational attainment of the population aged 20 and over, by age and gender, in 1955, 1967, 1975, and 1984.[22] There are several clear implications of the data. Consider first a

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[22]Age groups and schooling categories differ slightly from year to year, reflecting differences in the nature of the available data.

Table 3.1. Educational Attainment of the Population Aged 20 and Over, by Age and Gender, 1955-1984 (percentage distributions)

1955	Females			Males		
Age Group	None	Primary	Post-Primary	None	Primary	Post-Primary
20-24	78.9	17.5	3.6	35.1	53.0	11.9
25-29	84.9	13.2	2.0	39.5	50.4	10.1
30-34	87.4	11.4	1.2	44.2	46.1	9.7
35-44	90.3	8.6	1.0	50.7	41.6	7.7
45-54	94.8	5.2	0.0	65.6	29.3	5.1
55+	96.0	4.0	0.0	73.5	23.2	3.4
Total	85.7	12.4	1.9	45.6	45.2	9.2

1967	Females				Males			
Age Group	None	Primary	Secondary	Higher	None	Primary	Secondary	Higher
20-24	37.7	39.3	22.6	0.4	7.5	25.9	64.1	2.5
25-29	57.4	30.5	11.3	0.8	13.7	40.8	41.2	4.3
30+	73.0	20.1	5.8	1.1	30.8	44.2	21.7	3.4
Total	61.2	27.0	11.0	0.9	23.2	40.0	33.3	3.4

Table 3.1 (continued)

1975	Females				Males			
Age Group	None	Primary	Secondary	Higher	None	Primary	Secondary	Higher
20-24	16.0	38.6	44.5	1.0	2.3	18.5	74.8	4.4
25-29	29.4	41.5	27.8	1.3	3.6	26.4	61.0	9.2
30-34	42.9	39.0	16.7	1.3	5.9	34.5	48.7	10.9
35-39	57.9	32.7	8.7	0.8	9.6	44.5	38.1	7.8
40-44	62.9	30.6	5.8	0.7	12.7	51.3	31.7	4.3
45-49	72.8	22.4	4.1	0.7	19.6	52.1	25.7	2.7
50-54	76.7	19.4	3.7	0.2	23.3	51.3	21.6	3.8
55+	88.7	9.3	1.9	0.2	48.2	39.5	11.1	1.3
Total	42.1	34.4	22.7	1.0	11.0	34.9	47.8	6.3

1984	Females				Males			
Age Group	None	Primary	Secondary	Higher	None	Primary	Secondary	Higher
20-24	7.5	25.4	63.3	3.8	2.7	13.3	73.7	10.3
25-29	13.0	30.3	52.7	3.9	3.6	14.4	64.3	17.7
30-34	20.8	36.8	39.5	2.9	5.4	17.4	60.7	16.5
35-39	33.9	38.6	26.3	1.2	8.2	24.0	52.7	15.1
40-44	48.5	34.5	16.1	0.9	11.9	33.7	42.7	11.7
45-49	60.3	28.7	10.5	0.7	15.8	44.9	31.7	7.5
50-54	69.7	22.6	7.2	0.5	22.0	45.4	28.8	3.8
55-59	72.8	23.2	4.0	0.0	27.9	43.7	25.9	2.5
60+	85.6	10.8	3.6	0.0	46.0	36.6	15.7	1.7
Total	26.3	29.9	41.1	2.7	9.3	23.1	55.3	12.3

Sources:

1955: Congo Belge, 1957a, Table 21 and Congo Belge, 1957b, Table 15.
1967: Institut National de la Statistique, 1969, Annexe XV, p. 171, Annexe VIII, pp. 158-160.
1975: Calculated from survey data.
1984: Institut National de la Statistique, 1991a, Table 8, p. 65.

cross-sectional perspective. At each point in time younger cohorts have higher levels of schooling than their older counterparts. This phenomenon may be seen most easily by considering variations in the percentages with no schooling or in the percentages with secondary schooling as one moves across cohorts (age groups). Thus, for example, in 1955 fully 95 percent of women aged 45-54 had never been to school, while among those aged 20-24 the corresponding figure was distinctly lower, at 79 percent.

The rising levels of educational attainment of successive cohorts at each observation point reflect the increased provision of schooling over time. Hence, for any given age group educational attainment rises as one moves from earlier to later years. This increased exposure to schooling is evident as well from considering the time-series changes through the years in the educational profile of the adult population. That is, in each successive period covered by the table the adult population has distinctly higher levels of educational attainment than in the preceding period. In 1955, for example, more than 85 percent of women aged 20 and over had never been to school, and this percentage dropped to 61 in 1967, to 42 in 1975, and to 26 in 1984. Conversely, fewer than 2 percent of adult women had gone beyond primary school in 1955, whereas the corresponding percentages in 1967, 1975, and 1984 were 12, 24, and 44, respectively.[23]

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[23]Consideration of the cross-sectional and time-series data jointly reveals what at first glance may appear to be an anomaly: variability in the schooling of a given birth cohort over time. That is, for example, 16 percent of 20-24 year old women in 1975 had no schooling, while nine years later, 21 percent of women aged 30-34 (almost the same birth cohorts) had no schooling. Conversely, while 79 percent of 20-24 year old women had no schooling in 1955, 20 years later the corresponding percentage for 40-44 year old women had fallen to 63 percent. These variations reflect the effects of migration: in the first case, female migrants to Kinshasa between 1975 and 1984 who were aged 20-24 in 1975 had lower

An additional observation of note concerns the gender gap in educational attainment. In each period covered, males have higher schooling levels than females. However, there is a clear tendency toward diminution of this gender gap over time. For example, in 1955 males aged 20 and over were nearly five times more likely than females to have gone beyond primary school (9.2 percent compared to 1.9 percent). By 1967, this ratio had fallen to three, and it fell further to about 1.75 in 1975 and to 1.25 in 1984. This narrowing of the gender gap in educational attainment, in turn, reflects in large part the more rapid growth in female school enrollments than in enrollments of males.

While the gender gap overall has been narrowing, one area that has not seen narrowing is in the relative proportions of females and males with higher education. Across surveys and across cohorts within surveys, proportions of both males and females with post-secondary education rose over time. However, they rose at least as rapidly for men as for women. Hence, the magnitude of the relative differences has not diminished and the absolute differences have grown as the overall proportions with post-secondary education have increased.

It is worth reiterating that within the Congo, Kinshasa has traditionally drawn a disproportionate share of resources devoted to schooling. This can readily be seen by considering the educational attainments of young adults aged 20-24 as of the 1984 Census (Institut National de la Statistique, 1991a, pp. 31, 65). In Kinshasa, five-sixths of males and

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schooling levels than women that age who resided in Kinshasa in 1975, while in the second case female migrants between 1955 and 1975 who were aged 20-24 in 1955 had higher schooling levels than those residing in Kinshasa in 1955.

two-thirds of females had completed at least some secondary schooling, and under 3 percent of males and 8 percent of females had no schooling. By contrast, in the remainder of the country just under half of males aged 20-24 and less than one fifth of females that age had been to secondary school, while over 13 percent of males and nearly 42 percent of females had no schooling.

In effect, the 1984 schooling distribution for 20-24 year old females outside of Kinshasa was quite similar to the 1967 school distribution in Kinshasa for females that age, while for males the 1984 figures for those outside of Kinshasa entail slightly lower levels of educational attainment than those for males that age in Kinshasa in 1967. From this perspective, then, educational attainment in the rest of the country may be seen as lagging that in Kinshasa by perhaps 17-20 years.

Finally, note the magnitude of the changes over time in the educational attainment of the "typical" adult. In 1955, a woman in Kinshasa would most likely have never been to school, while by 1984 the modal group in the education distribution of women is the secondary level. For men, in 1955 there were almost equal percentages of those with no schooling and with primary schooling; by 1984, the majority of men had had secondary schooling.[24] Hence, over a period of less than 30 years there were huge changes in the educational levels of both women and men.

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[24]Note, however, that among those with secondary schooling in 1984 there is still a gender gap: women are almost equally divided between those with 1-4 years of secondary schooling and those with 5-6 years, while two thirds of men have attained 5-6 years (Institut National de la Statistique, 1991a, Table 8, p. 65).

Chapter 4. Employment

I. Changes Over Time in the City's Economy

As noted in chapter 2, the location of the city of Leopoldville was based on geographic considerations linked to river transportation. As the city grew and developed, the mismatch between its physical location, where the demand for labor was growing rapidly, and the location of supplies of potential workers necessitated recruitment of workers from rural areas (Lux, 1962). While especially in early times these workers were often from the relatively nearby Cataractes District of what is now the province of Bas-Congo, recruitment of workers also took place in more distant locales (cf., Dhanis, 1953; Lamal, 1954). Colonial authorities took considerable care to regulate labor migration to the city so as to respond to the availability of job opportunities (Capelle, 1947), and when labor demand diminished as in the Great Depression during the 1930s workers no longer in demand were sent from the city back to their rural areas of origin.

In brief, then, the situation during the colonial period was one where migration to Leopoldville was tightly controlled so as to ensure that adult male residents of the city had employment.[25] A direct consequence of this policy was that employment rates among males in the city were extremely high, and the vast bulk of employment consisted of salaried employment in the rapidly growing modern sector of the economy. While there were concerns about illegal migrants in the city, the number of such individuals was generally

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[25]Residents of Leopoldville during the colonial period were required to have documents in their possession, issued by the colonial Office of the Black Population, verifying that indeed they had legitimate employment in the city.

thought to be fairly limited (cf., Capelle, 1947), at least until near the very end of the colonial period (Houyoux and Kinavwuidi, 1977, p. 4).

However, with independence also came an end to effective controls on internal migration. The city began to grow rapidly again during the 1960s, but in contrast with previous growth spurts, this growth was no longer linked directly to the expansion of salaried employment in the modern sector. The political turmoil of the early 1960s in the Congo also contributed to the especially rapid growth of Kinshasa at that time. There were relatively large migrant flows from Katanga province in the south from 1960 to 1962, and from the Kasais, Bandundu, and Equateur provinces to the east and north of Kinshasa from 1963 to 1965 (Houyoux and Kinavwuidi, 1977, p. 6). In any case, the "divorce" between population growth and modern sector employment growth resulted in a period of relatively rapid growth of employment in the informal sector during the early years of independence.

By the late 1960s, a measure of political stability had been restored to the country, and for several years the economy showed signs of sustained growth. As noted earlier, though, the Zairianization and radicalization measures adopted in 1973 and 1974, in conjunction with the sharp fall of the price of copper, began a long downward slide for the economy that continued throughout the 1970s and 1980s and became acute in the 1990s. Modern sector employment from the mid-1970s until the early 1990s tended to grow only very slowly, so --as was the case in the early 1960s -- the informal sector served to pick up the slack and absorb a considerable proportion of Kinshasa's potential labor force. While reliable data are not available to measure employment at present, it seems clear that since

1991 Kinshasa's modern sector has shrunk substantially, while the informal sector has continued to grow very rapidly.[26]

II. Employment Growth and Structure

Data on the levels of employment and employment growth, separately by class of worker (salaried and independent[27]) and by gender, are shown in Table 4.1. Consider first the data on total employment in the lower third of the table. Over the period from 1955 to 1984 total employment increased by almost five-fold. During this same period, the city's population increased eight-fold, and the population aged 15 and over increased by almost seven-fold. Over the long haul, then, the level of total employment has failed to keep pace with the growth of the population and of the potential labor force, implying increased rates of unemployment and nonemployment.

The growth of total employment and its component parts during various periods since 1955 highlights the effects of changing economic circumstances. From 1955 to 1967, when the population aged 15 and over was growing by 6 percent per year, total employment grew by less than half that rate. In addition, reflecting the relaxing of controls on migration and the "divorce" between modern sector employment and migration, the rate of growth in

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[26]A prominent foreign industrialist in Kinshasa, interviewed in late 1994, indicated that employment in the more than 20 firms that he controlled had fallen by 25 percent since 1991.

[27]"Independents" as calculated in the table include unpaid family workers and apprentices.

Table 4.1. Total Employment and Employment Growth, by Class of Worker and Gender, 1955-1984

	Employment (000)			Annual Growth Rates (%)		
	Total Employment	Salaried Employment	Independent	Total Employment	Salaried Employment	Independent
Males						
1955	114.7	104.2	10.5	---	---	---
1967	150.6	130.2	20.4	2.3	1.9	5.7
1975	283.2	245.7	37.5	8.2	8.3	7.9
1984	408.0	301.2	106.8	4.1	2.3	12.3
Females						
1955	1.8	0.6	1.2	---	---	---
1967	7.2	5.4	1.9	12.2	20.1	3.9
1975	55.1	17.5	37.6	29.0	15.8	45.2
1984	167.4	39.0	128.4	13.1	9.3	14.6
Total						
1955	116.4	104.8	11.7	---	---	---
1967	157.8	135.5	22.3	2.6	2.2	5.5
1975	338.3	263.2	75.1	10.0	8.7	16.4
1984	575.4	340.9	234.5	6.1	2.9	13.5

Note: Totals do not always equal sum of components due to rounding.

Sources:

1955: Congo Belge, 1957a, Table 30; Congo Belge, 1957b, Table 20.
1967: Institut National de la Statistique, 1969, Table 73, p. 118 and Annexe XX, p. 179.
1975: Houyoux and Kinavwuidi, 1977, Table III.11, p. 175.
1984: Institut National de la Statistique, 1991a, Table 14, p. 74 and Table 10, p. 68.

informal sector employment (proxied here by growth in the number of independents) was two and a half times more rapid than the growth rate of salaried employment.[28]

Between 1967 and 1975, by contrast, total employment grew slightly more rapidly than did the population aged 15 and over (10.0 percent per year versus 9.4 percent per year). The growth of salaried employment took place at a slightly slower pace than the growth of the potential labor force, while employment in the informal sector grew at a rate almost twice as great as that for employment in the modern sector. After 1975, however, the effects of the country's emerging economic crisis are readily apparent: while total employment grew at a rate comparable to the growth rate of the potential labor force, the growth rate of salaried employment was minimal, being only about one-fifth the growth rate of the number of independents.

Hence, the economic crisis was characterized by an accelerated shift in the composition of employment towards increasing proportions of informal sector workers. In 1955 independents represented only 10 percent of total employment. This figure increased to 14 percent in 1967 and 22 percent by 1975; and between 1975 and 1984 it almost doubled, rising to 41 percent.

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[28]Although a very small number of independents may be found in the modern sector, the vast majority of independents work in the informal sector. Salaried workers may be either in the formal or in the informal sector, constituting the bulk of workers in the former and a minority of those in the latter. Thus, while the distinction between salaried and independent workers is not identical to the distinction between the modern and informal sectors, it is evident that more rapid growth in the number of independents than in the number of salaried workers is a clear sign of expansion in the relative importance of employment in the informal sector.

Consideration of the gender differences in Table 4.1 reveals that the most rapid increases in employment have been those of women. The rate of growth of female employment was three to five times that of male employment in each period covered by the table. Overall, women's share of the total employed population increased from less than two percent in 1955 to nearly 30 percent by 1984. And while female salaried employment actually grew more rapidly than informal sector employment between 1955 and 1967, after 1967 and for the full period female employment growth has been more heavily concentrated in the informal sector.

Associated with the growth and changing structure of employment in terms of class of worker has been a substantial shift in the industrial structure of employment (Table 4.2). In 1955 fully half of the employment in Leopoldville was in manufacturing and construction (secondary sector), while most of the other half was in the tertiary sector. Over the next 12 years the balance between these two sectors shifted dramatically: employment in the secondary sector fell to less than 30 percent of the total, predominantly reflecting a sharp decline in the absolute number of workers in construction, while tertiary sector employment increased to two thirds of total employment. Growth in employment in general (including public) services was especially large. These trends continued through 1984, by which time barely one sixth of total employment was in manufacturing or construction while nearly three fourths of total employment was in the tertiary sector.[29]

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[29]Differences across the various surveys in the coverage of Kinshasa make it difficult to assess changes in the importance of primary sector employment (predominantly agriculture). The 1955 and 1984 data include agricultural workers residing on the outskirts of the city but who are still part of the administrative region of Kinshasa. The 1967 and 1975 surveys did not include these more remote residents, and hence tend to understate the extent of primary sector employment in the broader region.

Table 4.2. Employment by Industry, 1955-1984

Industry	1955	1967	1975	1984
Employment				
Agriculture	4372	2610	18270	50350
Mining	816	370	1090	2020
Manufacturing	32834	33700	64350	75530
Construction	25228	13350	22340	21870
Water/electricity	0	2110	4310	4960
Commerce	16804	25770	70360	215940
Banks	0	4490	7890	9190
Transport & comm.	16828	22790	43300	53020
Services-general	9240	39120	80150	132590
Services-personal	9733	10930	25920	*
Don't Know	0	2520	350	9920
Total	115855	157760	338330	575400
Industry	1955	1967	1975	1984
Percentages				
Agriculture	3.8	1.7	5.4	8.8
Mining	0.7	0.2	0.3	0.4
Manufacturing	28.3	21.4	19.0	13.1
Construction	21.8	8.5	6.6	3.8
Water/electricity	0.0	1.3	1.3	0.9
Commerce	14.5	16.3	20.8	37.5
Banks	0.0	2.8	2.3	1.6
Transport & comm.	14.5	14.4	12.8	9.2
Services-general	8.0	24.8	23.7	23.0
Services-personal	8.4	6.9	7.7	*
Don't Know	0.0	1.6	0.1	1.7
Total	100.0	100.0	100.0	100.0

Table 4.2 (continued)

Percentage distributions by sector				
	1955	1967	1975	1984
Primary	4.5	1.9	5.7	9.1
Secondary	50.1	29.8	25.6	16.9
Tertiary	45.4	66.7	68.6	72.2
Don't Know	0.0	1.6	0.1	1.7
Total	100.0	100.0	100.0	100.0

Notes:

Total employment for 1955 is lower than that listed in Table 4.1 due to omission of 624 salaried females (for whom data were not available) from this table.

* Data for 1984 group all service workers together.

Reported data for 1984 include unemployed workers. The reported totals have been revised downward proportionately for this table so as to correspond to employment and hence eliminate unemployed individuals.

Sources:

1955: Congo Belge, 1957a, Table 33; Congo Belge, 1957b, Table 21.

1967: Institut National de la Statistique, 1969, Table 61, p. 108 and Table 62, p. 109.

1975: Houyoux and Kinavwuidi, 1977, Table III.14, p. 178, and Annexe III.10, pp. 205-212.

1984: Institut National de la Statistique, 1991a, Table 11, p. 69 and Table 10, p. 68.

Of particular significance is the substantial increase after 1975 in the proportion of the work force engaged in commerce. Total employment grew by 70 percent from 1975 to 1984, while employment in commerce tripled and accounted for more than 60 percent of the growth in total employment. This rapid growth of employment in commerce reflects household survival strategies in which increased participation in the informal sector of the economy seeks to counter the effects of declining real incomes of wage and salary workers.

There were increases in informal-sector participation in commerce for men as well as for women. In 1975, 56 percent of those in commerce were male, and 44 percent of these males were independents. Among women in commerce in 1975, 91 percent were independents. By 1984 women outnumbered men in commerce, reflecting much more rapid relative growth for women, and 56 percent of males as well as 93 percent of females in commerce were independents (Institut National de la Statistique, 1991a, Table 15).

III. Employment by Age and Gender

A complementary perspective on employment is provided by the data in Tables 4.3 and 4.4. More specifically, employment rates by age and gender are shown in Table 4.3. For males, variations in these rates over time in large measure reflect fluctuations in the health of the city's economy. Nearly 90 percent of males aged 15 and over were employed in 1955; among those aged 25 and above, the figure was 94 percent. Twelve years later, employment rates of males aged 15 and over had fallen to 67 percent. This overall drop reflected substantial declines for those aged 15-24, many more of whom were in school in

Table 4.3. Percentage Employed, by Age and Gender, 1955-1990

	Males				Females				
Age Group	1955	1967	1975	1984	1955	1967	1975	1984	1990
15-19	53.2	5.5	5.5	5.9	2.0	[b]	2.4	5.2	9.5
20-24	91.2	49.5	39.0	29.1	1.7	[b]	11.5	18.5	27.2
25-29	94.1	85.3	84.5	66.7	1.9	[b]	15.9	32.1	43.4
30-34	93.9	91.1	94.1	84.7	2.0	[b]	17.8	37.7	55.1
35-44	95.6	92.5	96.2	90.3	4.5	[b]	21.7	40.5	56.1
45-54	93.9	82.0[a]	94.5	87.8	4.1	[b]	28.5	43.3	52.4[c]
55+	83.1	---	65.0	61.5	8.5	[b]	19.6	32.5	---
Total 15+	89.0	66.7	63.0	55.7	2.6	3.8	13.7	25.5	34.2[d]
Total 25+	93.9	88.2	89.5	79.7	3.1	3.7	20.0	37.1	49.7[e]

[a] Ages 45 and above.
[b] Data not available.
[c] Ages 45-49.
[d] Ages 15-49.
[e] Ages 25-49.

Sources:

1955: Congo Belge, 1957a, Table 30 and Table 9; Congo Belge, 1957b, Table 20 and Table 6.
1967: Institut National de la Statistique, 1969, Table 58, p. 106 (males) and Annexe XX, p. 179 (females).
1975: Houyoux and Kinavwuidi, 1977, Annexe III.2, p. 196 (males) and Annexe III.3, p. 197 (females).
1984: Institut National de la Statistique, 1991a, Table 10, p. 68.
1990: Calculated from data.

Table 4.4. Percentage of Employed Workers Who are Independent, by Age and Gender, 1955-1990

	Males			Females			
Age Group	1955	1975	1984	1955	1975	1984	1990
15-19	3.2	17.7	54.3	28.0	33.6	81.0	98.1
20-24	4.0	13.0	38.6	44.4	32.4	70.5	91.4
25-29	5.5	9.6	29.5	77.8	52.3	65.2	87.1
30-34	9.6	12.2	24.6	87.0	72.2	70.3	85.7
35-44	12.4	13.3	19.7	73.5	88.0	83.4	86.2
45-54	19.9	14.5	21.1	81.0	91.8	92.1	81.2[a]
55+	28.7	20.3	32.8	81.8	93.1	94.1	---
Total 15+	9.2	13.2	26.2	67.1	68.1	76.7	88.0[b]
Total 25+	11.2	13.1	24.2	78.7	77.9	77.7	86.1[c]

[a] Ages 45-49.
[b] Ages 15-49.
[c] Ages 25-49.

Sources:

1955: Congo Belge, 1957a, Table 30 and Table 9; Congo Belge, 1957b, Table 20 and Table 6.
1975: Calculated from data.
1984: Institut National de la Statistique, 1991a, Table 14, p. 74.
1990: Calculated from data.

1967 than had been the case in 1955, and modest declines for older men. Among those aged 25 and over, the decline in the employment rate was much smaller, to 88 percent.

By 1975, the overall employment rate of males aged 15 and over had fallen modestly, primarily as a consequence of reduced employment among those in their early 20s (a group whose school enrollment rate rose from 41 to 54 percent between 1967 and 1975). Reflecting the economic expansion of the late 1960s and early 1970s and the fact that the adverse consequences of Zairianization had not yet had much impact on the Kinshasa labor market, the employment rate of males aged 25 and over had actually risen slightly to 90 percent. However, after a decade of poor economic performance, by 1984 employment rates had fallen in every age group but the youngest, and only 80 percent of men aged 25 and over were employed. A good indicator of the increasing difficulty of obtaining employment is the fact that a third of all men aged 25-29 were without employment in 1984.

Over the full period, then, the percentage employed by age for males shows sharp reductions right away for those under age 25 and modest reductions for those aged 25-29, reflecting increased school enrollment. After 1975, however, there are further sharp reductions in employment of younger men (ages 20-29) as well as moderate reductions in employment of those aged 30 and over, due to the deterioration in the economy.

The employment experience of women has been quite different from that of men. There has been a steady increase over time in women's economic activity.[30] While this increase has taken place among all age groups, it has been greatest among women aged 25-54 (see Figure 4.1). In effect, then, women's employment was much less tied to fluctuations in the state of the city's economy than men's employment. Overall, one fourth of women aged 15 and over and 37 percent of those aged 25 and over were employed in 1984, and by 1990 these figures (with an upper age limit of 49) had risen to 34 and 50 percent, respectively.

The data in Table 4.4 document the increase that has taken place over time in the share of total male employment represented by independents.[31] In 1955, less than one in ten employed males in Leopoldville worked as an independent; by 1984, this figure had increased to one in four. Between 1975 and 1984, the percentage of employed males who were independents rose in every age group, and most dramatically for workers under age 30.

Among women, by contrast, independents have constituted the major share of total employment throughout the years. For females as for males, though, the slowdown in the

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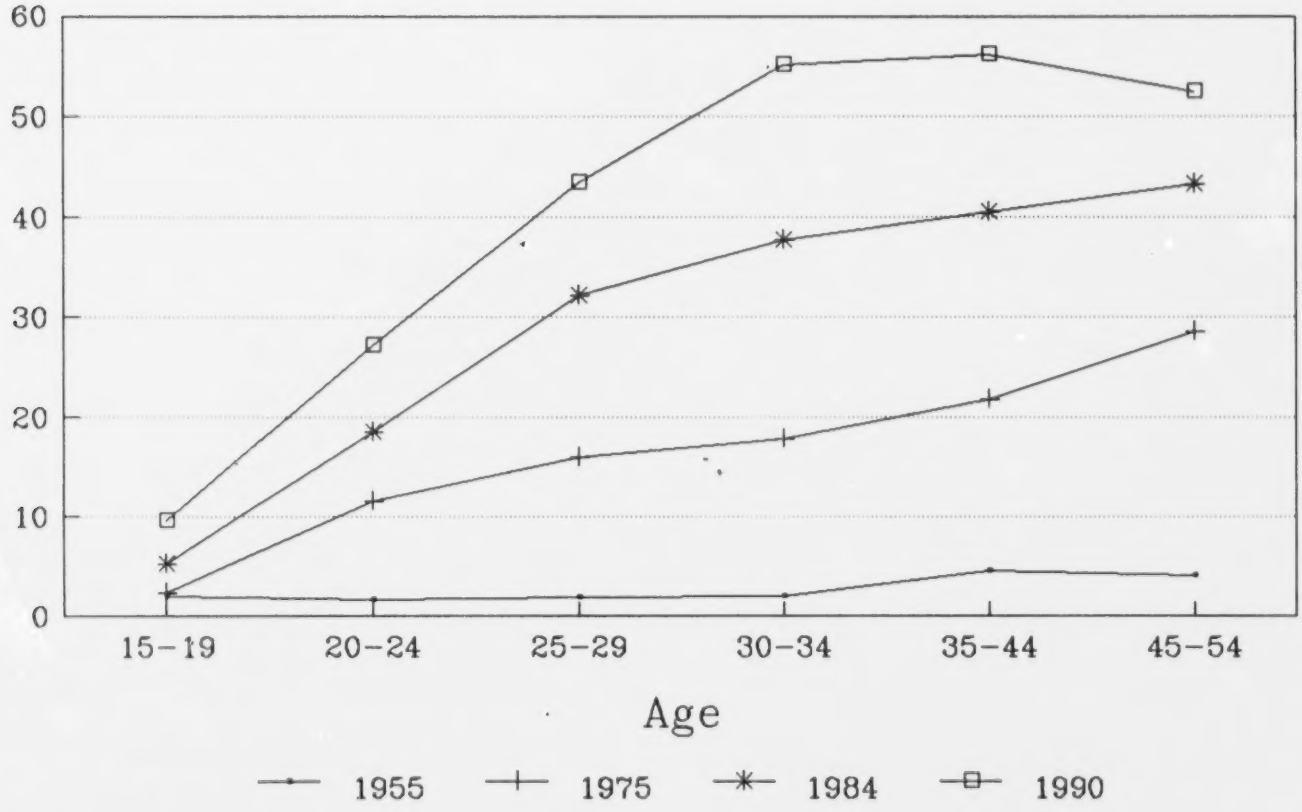
[30]Because the 1990 survey probed for information on economic activity of women, it is possible that the employment rates for 1990 in Table 4.3 are biased upward somewhat compared to the rates for the earlier general surveys, which did not probe for this information. However, the rapid growth in female employment rates from 1975 to 1984 and the persistence of economic difficulties throughout the 1980s suggest to us that the continued growth after 1984 implied by our data is a good representation of the actual situation.

[31]Here and elsewhere in this work, we consider only the primary employment of individuals. In fact, the economic crisis since the mid-1970s has seen an explosion of independent secondary activities in the informal sector, in an effort to offset the effects of declining real salaries. These activities are not well-measured, however, and they are beyond the scope of this work.

Fig. 4.1. Percentage Employed, by Age Group, Women Aged 15–54, 1955–1990



Based on data in Table 4.3.
N.B. For 1990, the highest age category refers to women aged 45–49.

growth of modern sector economic activity after 1975 -- reflected in the slow growth of salaried employment (Table 4.1) -- translates into clear increases in the proportion of all employed workers who are independents. These increases are most apparent among those under age 30.

For both males and females, the growth in the share of employment represented by independents reflects rapid growth of the informal sector in the face of grossly inadequate employment opportunities in the modern sector. Access to modern-sector jobs clearly became especially difficult for young workers as time went by. As of 1990, then, prior to the onset of the acute economic crisis, the Kinshasa labor market already showed signs of an economy in distress.

Chapter 5. Fertility

This chapter provides an overview of fertility in Kinshasa during the period from 1955 to 1990. We begin by looking at levels of and differences in fertility, with emphasis on two factors -- ethnicity and education -- that have been important correlates of fertility. We also examine changes in age-specific fertility rates. This is followed by an examination of childlessness and the percentage of women who are married, and how these two variables, one an important outcome of fertility and the other a key proximate determinant of fertility, have changed over the years.

I. Fertility from 1955 to 1990

Table 5.1 provides an overview of data on fertility in Kinshasa. Romaniuk's estimates for 1955, adjusted for underreporting of births, present a picture of a high-fertility population, with a total fertility rate of about 7.5.[32] Indeed, in a departure from the more usual pattern, fertility was higher in Kinshasa and in other urban areas of the Belgian Congo in the 1950s than in rural areas, with estimated crude birth rates of 55 per thousand in urban areas compared to 43 per thousand in rural areas (Gouvernement Central de la République du Congo, 1961; Romaniuk, 1967, 1968).

This urban-rural differential in part reflected the presence of high levels of sterility and childlessness in certain rural areas in the northern parts of the country. In some districts

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[32]The unadjusted data, as reported by Romaniuk (1967, Table II.1, p. 55), yielded a crude birth rate of 52.2, a general fertility rate of 244, and age-specific fertility rates that implied a total fertility rate of 6.68. Hence, Romaniuk's adjustments increased the first measure by 2.5 percent and the latter two measures by 12-13 percent.

Table 5.1. Fertility Estimates for Kinshasa, 1955-1990

Year	Crude birth rate	General fertility rate	Total fertility rate
1955	53.5	275	7.51
1967	51.6-60	243-282	NA
1975	48.9-54.9	250-261	7.5
1984	51.5	230	7.7
1990	NA	197	5.65

NA= not available (for 1967, no estimate of the TFR was provided; for 1990, the data are insufficient to permit calculation of the crude birth rate).

Sources:

1955: Romaniuk, 1967, Tables II.12 and II.13.

1967: Institut National de la Statistique, 1969, pp. 65-66.

1975: Houyoux and Kinavwuidi, 1977, p. 114 (high estimates of crude birth rate and general fertility rate; no estimate given for total fertility rate); Sala-Diakanda, 1980, Table 36 (low estimates of crude birth rate and general fertility rate and TFR estimate).

1984: Institut National de la Statistique, 1993, Table I02 (crude birth rate and total fertility rate); general fertility rate is estimated based on crude birth rate and the population of women aged 15-44 given in Institut National de la Statistique, 1991a, Table 1.

1990: calculated from survey data on births during the five years preceding the survey.

as many as 35-40 percent and more of women over the age of 15 were childless, compared to a national average of 28 percent and a figure for Kinshasa of 26 percent (Romaniuk, 1967, p. 63). In addition, Romaniuk argued that the system of family allowances for salaried workers that prevailed in Kinshasa, a massive housing construction program, improved health care and especially prenatal care and hospital births, and efforts to combat venereal disease all contributed to the especially high level of fertility in the city (Romaniuk, 1967, pp. 162-167).[33] Further, Sala-Diakanda has suggested that selective migration of high-fertility women may also have been a contributing factor (1980, p. 205).

While the overall level of fertility was quite high, there were substantial differences in fertility across different ethnic groups in the city. In brief, Kinshasa residents who were originally from those parts of the country where sterility was high tended themselves to have low fertility, while residents from areas not affected by sterility did not have low fertility. The magnitudes of these differences by broad ethnic group are shown in the first column of data in Table 5.2.[34] The Ubangi and Mongo women (originally from the north of the Congo) have especially low fertility, with general fertility rates that are only 59 percent and 75 percent of the city average, respectively. Bakongo women had above-average fertility, by

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[33]The high levels of sterility among certain of the Congo's ethnic groups were convincingly linked to relatively high levels of venereal disease by Romaniuk (1961, 1967, ch. 10). See also Retel-Laurentin (1974).

[34]The overall general fertility rate for the city shown in Table 5.2 is below that reported in Table 5.1 because the data in Table 5.2 have not been adjusted for underreporting of births. Unfortunately, adjusted data by ethnic group within Kinshasa are not available. However, while the level may thus be too low, the table does give a good indication of the magnitudes of the differences by ethnic group.

Table 5.2. General Fertility Rates by Broad Ethnic Group, 1955 and 1975

Ethnic group	1955[a]	1975[b]
Bakongo North	335	238
Bakongo South	261	229
Kwilu-Kwango	214	263
Mongo	182	226
Ubangi	145	220
Luba and related	232	267
All women[c]	244	240

[a] Births per 1000 women aged 15-45. Calculated from data on fertility of principal tribes in Congo Belge, 1957a, Table 18, and Congo Belge, 1957b, Table 12. Since only principal tribes are covered (i.e., the data are not exhaustive), the ethnic group categorizations are not complete. However, the data on principal tribes included approximately 86 percent of the total population, and we are confident that the numbers reported here provide a good indication of fertility differences by broad ethnic group.

[b] Births per 1000 women aged 15-44. Calculated from the 1975 survey data, based on reported fertility for the five years preceding the survey.

[c] Includes women not in the six major broad ethnic groups. For the six groups only, the GFR in 1955 was 244, the same as the overall level, while in 1975 it was 243, slightly higher than the city-wide figure.

7 percent for those originally from Bas-Congo province south of the Congo River, and by 37 percent for those from Bas-Congo province north of the river.

Estimates of fertility from the 1967 and 1975 surveys, shown in Table 5.1, suggest that over the 20-year period following the 1955 survey there was little change in the overall level of fertility. This absence of change in fertility, during a period when women's exposure to schooling increased tremendously, at first glance seems incongruous. We will return to this issue shortly.

While the overall fertility level remained fairly stable between 1955 and 1975, there was considerable change taking place in the fertility behavior of different ethnic groups in Kinshasa, as may be seen by comparing the two columns of data in Table 5.2. The general fertility rates of the two Bakongo groups declined, with a 29 percent drop for the North group and a 12 percent drop for the South group. However, these reductions were offset by increases for the other four groups. Most notable in this regard was the more than 50 percent increase in the general fertility rate of Ubangi women and the nearly 25 percent increase for Mongo women, bringing these two groups to fertility rates corresponding to more than 90 percent of the city-wide average. The Kwilu-Kwango and Luba and related groups went from being somewhat below average to being roughly 10 percent above average.

This reduction in fertility differentials by ethnic group in Kinshasa mirrored what was going on elsewhere in the country (Sala-Diakanda, 1980, Table 24, p. 146). Presumably, the narrowing of differentials reflected reductions in the incidence of sterility as a consequence

of public health efforts to combat venereal disease during the 1950s and 1960s (Bruaux et al., 1957; Sala-Diakanda, 1980).

By 1975, however, a new factor had emerged associated with distinct differences in fertility: women's educational attainment. As shown in Table 5.3, clear differences in fertility by schooling level were evident. In a pattern that has been observed in a number of countries in sub-Saharan Africa (cf., United Nations, 1986; Jolly and Gribble, 1993; Ainsworth et al., 1995), the highest fertility was actually that of women with primary schooling, and there were progressively lower levels of fertility for women with secondary education or higher as educational attainment increased beyond the primary level.[35] Particularly beyond the first two years of secondary school, increased education appeared to result in sharp declines in fertility. However, because women with at least three years of secondary education were only about 13 percent of the total number of women of reproductive age, they had a negligible impact on the overall fertility level. The massive exposure of women to schooling between 1955 and 1975 had been most heavily concentrated at the primary level, and since women with this level of schooling had the highest fertility it is not surprising that the overall level had failed to decline (Shapiro, 1996).

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[35]The one exception to this statement is for the general fertility rate of university-educated women, which is slightly greater than the GFR for women with five or six years of secondary education (although the TFR is distinctly lower). This apparent anomaly reflects the fact that university-educated women were heavily concentrated in the peak ages of childbearing. That is, for the sample as a whole as well as for women with 5-6 years of secondary schooling, a little more than half of the women aged 15-49 were 20 to 34 years old, while among university-educated women the corresponding figure was nearly 70 percent. This bulge in the age distribution at ages where fertility is highest would inflate the GFR while not having an impact on the TFR.

Table 5.3. Fertility by Educational Attainment, 1975

Educational attainment	General fertility rate	Total fertility rate
None	251	7.56
Primary	269	7.74
Secondary 1-2	204	6.99
Secondary 3-4	193	6.52
Secondary 5-6	138	3.85
University	144	3.31
All women	240	7.20

Based on reported fertility histories for the period from 1970-74.

Indeed, Sala-Diakanda's analyses of fertility of married women in Kinshasa in 1975, while failing to find any impact of schooling among those aged 45-54, did find that schooling was significantly negatively related to the fertility of wives aged 25-34. In a rather prescient statement, he suggested that in the city, ethnic identity might well diminish progressively over time as a factor influencing fertility and yield its place to individual factors such as schooling (Sala-Diakanda, 1980, p. 217).

The fertility estimates from the 1984 census (Table 5.1) indicate that fertility in Kinshasa did not change very much between 1975 and 1984. The reported crude birth rate is comparable to or slightly lower than that for earlier years, the estimated general fertility rate is somewhat lower, and the reported total fertility rate is slightly higher. In view of the sharp increase in women's educational attainment during this period and particularly the substantial rise in the proportions of women of reproductive age who had been to secondary school or beyond (cf., Table 3.1), this absence of change in fertility is surprising. Unfortunately, there is no detail available on the fertility estimates for 1984 (e.g., estimates of general or total fertility rates by educational attainment, or information on age-specific fertility rates). However, we are skeptical about these estimates: it seems unlikely to us that they provide a good indication of fertility as of 1984, given the other changes that had been occurring, particularly in educational attainment of the female population and in proportions married (to be discussed in the following section).

In marked contrast, our survey data suggest that there was a notable decline in fertility by 1990 (Table 5.1). This decline appears to be clearly linked to increasing

educational attainment of the female population of reproductive age (Shapiro, 1996) and delays in entry into marriage associated with prolongation of schooling of young women.

Table 5.4 provides fertility estimates as of 1990 for the different ethnic groups and the different educational attainment groups. Relative to the situation in 1975, fertility of each of the different ethnic groups has declined, with the drop being greatest for the Bakongo North group and smallest for the Luba and related group. With respect to the different educational groups, there have been clear declines in the fertility of those with no or only primary schooling and there appear to have been modest increases for those with the two highest levels of schooling.[36] However, overall the pattern of differences by educational attainment remained essentially the same in 1990 as it had been in 1975, with the highest fertility being that of women with primary schooling and fertility falling progressively as schooling increased beyond the primary level. Because the overall educational attainment of the female population had increased dramatically, and particularly at the secondary level, fertility overall declined.

A final perspective on changes in fertility over time is provided by Figure 5.1, which shows age-specific fertility rates for the three survey years for which they are available: 1955, 1975, and 1990. The rates for 1955 shown in the figure are the reported age-specific fertility rates (Romaniuk, 1967, Table II.1) adjusted upward so as to produce the same total

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[36]Because we use two different measures of fertility, whether fertility for a given education group rose or fell between 1975 and 1990 is not always apparent. This is the case for two of the six groups, for which the changes in the two fertility measures are in opposite directions. Reflecting the observations in the preceding footnote, our statement in the text puts weight on the TFR estimates rather than the GFR estimates for university-educated women.

Table 5.4. Fertility by Ethnic Group and by Educational Attainment, 1990

Ethnic group	General fertility rate	Total fertility rate
Bakongo North	172	4.95
Bakongo South	178	5.15
Kwilu-Kwango	219	6.19
Mongo	182	5.05
Ubangi	172	4.45
Luba and related	235	7.29

Educational attainment	General fertility rate	Total fertility rate
None	216	5.89
Primary	247	6.86
Secondary 1-2	213	6.44
Secondary 3-4	181	5.41
Secondary 5-6	175	4.50
University	99	3.55
All women	202	5.75

Based on reported fertility histories for the period from 1985-89.

fertility rate of 7.51 reported by Romaniuk.[37] The age-specific fertility rates from the 1975 survey, as well as those from our 1990 survey, are based on the reported fertility histories for the five years preceding each of the surveys. In the case of the 1975 survey, it should be noted that this procedure yields an estimate of the total fertility rate of 7.2, four percent lower than the estimate reported in Table 5.1.

Figure 5.1 shows a clear decline in fertility of 15-19 year olds between 1955 and the early 1970s. From age 20 on, however, the age-specific fertility rates are quite similar. Between the early 1970s and the late 1980s, by contrast, there are more substantial changes at both the low and high ends of the age range. Rates for those under age 30 (and especially those aged 20-24) decline substantially, and there is also a drop in fertility for women aged 30-34. Further, age-specific fertility rates of women over the age of 40 appear to have fallen sharply as well.

Overall, then, the period from the early 1970s to the late 1980s is one during which the total fertility rate appears to have declined by more than 20 percent, at least (based on the same methodology applied to both surveys, with no adjustment for underreporting of births or age misreporting).[38] Further, the declines appear at both the lower and upper ends of the age distribution. Caldwell et al. (1992) suggest that fertility decline in sub-Saharan Africa

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[37]In addition, we have further adjusted the 1955 data, which were reported in 10-year intervals beginning with age 35. The adjustments in this case were based on the 5-year age-specific fertility rates for 1970-74, designed to reproduce the ratios across 5-year age groups while retaining the same overall total fertility rate.

[38]To the extent that underreporting of births or misreporting of age is more prevalent among women with low levels of education, this problem will have been more significant in 1975 than in 1990.

Fig. 5.1. Age-Specific Fertility Rates, 1955, 1970-74, and 1985-89

Romaniuk 1967, T.II.1 (adj. prop. to TFR level); calculated from reported births for the 5 years preceding each survey.

will be as large among younger women as among older women. Our 1990 data indeed show generally greater declines in age-specific fertility rates among younger women than among older women.

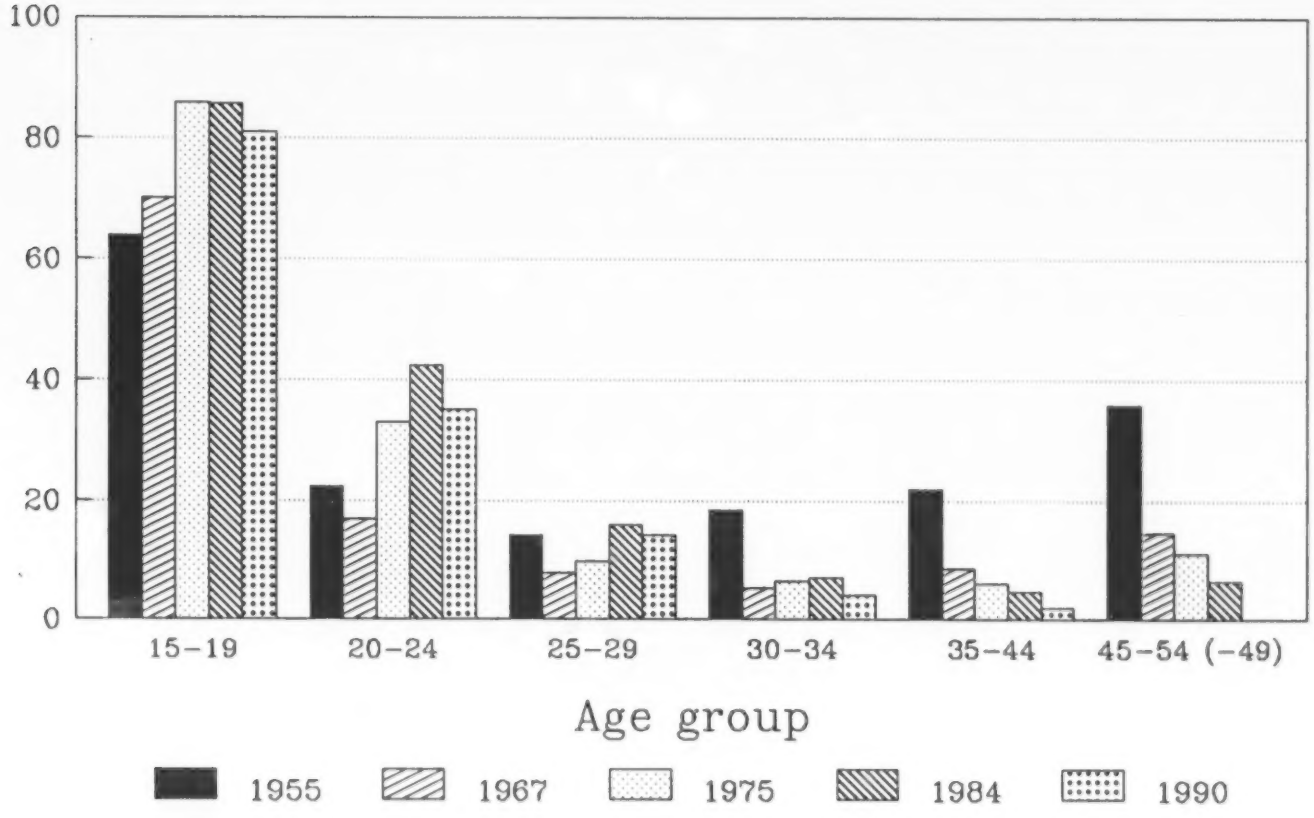
II. Childlessness and Marriage

In the previous section, we noted that in the 1950s differences between fertility in Kinshasa and fertility elsewhere in the country, as well as differences in fertility among ethnic groups in Kinshasa, were linked to variations in the incidence of sterility. Further, it was noted that over the succeeding 20 years these differences diminished in magnitude. These changes are evident in Figure 5.2, which shows the proportion of women who were childless, by age group, for the period from 1955 to 1990.

It is apparent from the graph that there was a remarkable drop in childlessness among women aged 30 and older after 1955. For each of the three oldest groups shown, childlessness fell sharply from 1955 to 1967, there was a 65-70 percent decline in childlessness between 1955 and 1975, and there appear to have been further declines after 1975.[39] Among the younger age groups, by contrast, there was a substantial increase in the proportion of women who were childless up through 1975 for those aged 15-19 and up

[39]For 1967 and 1990, the maximum age for which data are available is 49. Hence, in the figure the oldest group for those two years is 45-49 rather than 45-54. Among the relatively small number of women aged 45-49 who were interviewed in 1990, none reported themselves as childless. For the two years for which available data permit calculation for ages 45-49 and 50-54 separately as well as combined (1975 and 1984), the percentage childless among those aged 45-54 is only slightly higher (by 2.0 and 0.8 percentage points, respectively) than that for those aged 45-49.

Fig. 5.2. Percentage Childless, by Age Group, 1955–1990



CB 1957a, T.20, CB 1957b, T.14; INS 1969 Annexe XI, T.3; INS 1991, T. 6; 1975 and 1990: calculated from data.

through 1984 for those aged 20-24. Figure 5.3, which shows the percentage childless in relation to the percentage enrolled in school for women in these two age groups, documents the strong positive association between these two variables.

This strong positive association among younger women in fact reflects the link between increased access to schooling and a reduced propensity to be married. That is, while fertility outside of marriage is certainly not insignificant in Kinshasa, the vast majority of births occur to married women. Hence, as is the case more generally, marriage is a key proximate determinant of fertility.

In Kinshasa as elsewhere in sub-Saharan Africa, marriage may take a number of different forms. In particular, the various surveys have typically enumerated married women in monogamous unions, in polygynous unions, and in consensual or de facto unions ("union de fait"). Further, our more detailed survey in 1990 determined that a number of women who indicated that they were not married in response to an initial question on marital status (comparable to the questions in the large-scale surveys) did in response to further probing indicate that they were in an ongoing sexual union (and hence, at risk of becoming pregnant).[40] However, here, for purposes of comparability, we identify as married women in 1990 those who indicated they were married in response to our initial question on marital status.

The percentage of women married, by age group and by survey year, is shown in Figure 5.4 for women aged 15-29. For the youngest of these women, there was a sharp

[40]The issues surrounding definition of marital status and in particular the implications of alternative definitions will be explored more fully in subsequent work.

drop from 1955 to 1967 and another steep decline, to less than 20 percent, between 1967 to 1975. There were continued more moderate decreases after 1975 as well; overall, by 1990 only 12 percent of young women in this group were married compared to 62 percent in 1955. Among women aged 20-24, there were slower and more steady declines throughout, with the largest absolute decrease occurring between 1975 and 1984. The percentage married essentially was cut in half over the period, from 91 to 46. There were also declines in the percentage married among those aged 25-29, with the largest being between 1955 and 1967 and again between 1975 and 1984.[41] However, these reductions were more modest than those for the younger groups, so that between 1955 and 1990 the percentage married fells from 93 to 75.

Among women aged thirty and over, changes in the percentage married were both more modest and less characterized by trends. There was a slight decline from 88 percent to 82 percent married for those aged 30-34, while among those aged 35-44 the percentage married fluctuated within a narrow range (81-85 percent), with the maximum value in 1975. The percentage married among women aged 45-54 fluctuated between 67 and 71 up through 1984, and appears to have declined by 1990 (only 64 percent of those aged 45-49 were married in 1990, and typically these women have a higher percentage married than those aged 50-54).

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[41]It is worth noting that the decreases in proportions married between 1975 and 1984 would imply, all other things being equal, a reduction in fertility. Clearly, this implication is not consistent with the 1984 census estimates indicating that fertility during that period was more or less stable.

Overall, then, there were very substantial declines over time in the percentage of young women (under age 25) who were married. There were also noteworthy reductions in the percentage of women aged 25-29 who were married, and small declines in the likelihood of 30-34 year old women being married. Within the full period, it is also noteworthy that for women aged 20-29 there were particularly large reductions in proportions married between 1975 and 1984. Given that ages 20-34 have constituted the peak ages of fertility in Kinshasa throughout this period, and that married women have much higher fertility rates than unmarried women, these changes in marital status are quite consistent with our argument above that fertility in Kinshasa has declined since 1975.

Chapter 6. Summary and Conclusion

The data presented in the preceding chapters have documented the considerable growth of Kinshasa's population between 1955 and 1990, as well as the changing composition of the population by age, gender, nativity, and ethnicity. During this same period there have been substantial increases in school enrollment of youth and in the educational attainment of the adult population, particularly so for females.

Employment of women has increased steadily over time, in part associated with increasing educational attainment and in part reflecting economic difficulties that began in the mid-1970s and continued throughout the period covered by the data. Subsequent to these economic difficulties, there have been distinct increases in the importance of the informal sector of the economy for women and for men.

Finally, the concluding substantive chapter has traced the evolution of fertility over time, with a particular emphasis on fertility differentials by ethnic group and by educational attainment. The chapter argues that, associated primarily with the increased educational attainment of women and more specifically with women's acquisition of secondary schooling, there has been a decline in fertility. By 1990, the estimated total fertility rate for Kinshasa is less than 5.7, or almost 25 percent lower than estimates of the total fertility rate for 1955 and 1975.

Cohen's (1993) extensive review of fertility in sub-Saharan Africa documented that, despite the limited extent of fertility transition (cf., Tabutin, 1997), in several countries fertility was distinctly lower than the national average in one or more large cities. The data presented in this monograph provide evidence of relatively low fertility in Kinshasa: the

1984 census estimated the national total fertility rate to be 6.7 (Institut National de la Statistique, 1991c). Increased schooling of women at the secondary level and concomitant reductions in proportions married appear to be the key factors associated with fertility decline in Kinshasa. Subsequent work will explore these and related aspects in more detail.

Since 1990, Kinshasa and the rest of the Congo have experienced an acute economic crisis that constitutes an acceleration of the downward slide of the economy that began in the mid-1970s. This acute crisis most likely has slowed and even reversed previous increases in school enrollment rates of youth, has resulted in shrinkage of the city's modern sector of employment, and has further inflated the informal sector of the economy. With respect to fertility, there is good reason to believe that the crisis has probably contributed to further reductions (cf., National Research Council, 1993; Eloundou-Enyegue, 1997).

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